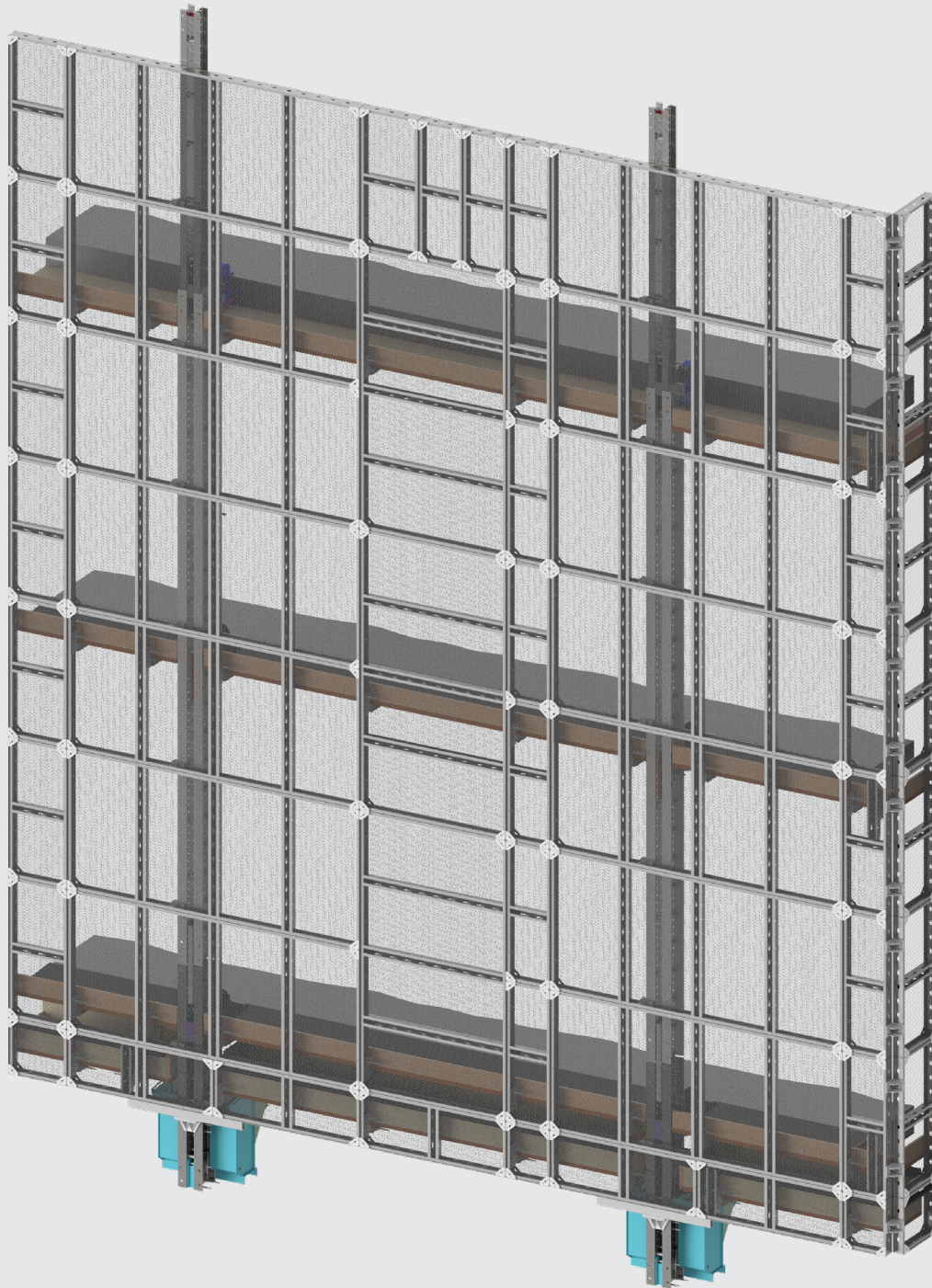


SAFESCREEN G2

Perimeter climbing screen system

User Guide



Keep for later use!

Contents

1	Product information	4
1.1	System features.....	4
1.2	Intended use	4
2	General notes about formwork systems	5
2.1	Information regarding intended and safe use.....	5
2.2	On-site safety general notes.....	6
2.3	About this user guide.....	9
2.4	Other relevant documents.....	11
3	Overview	12
4	Components.....	14
4.1	Climbing brackets and anchors.....	14
4.2	Power unit and hydraulics	18
4.3	Rails, connectors and ancillaries.....	18
4.4	Cladding	25
4.5	Platforms.....	33
4.6	Rubber covers and brushes.....	36
4.7	Loading platform components	38
4.8	Tools	39
4.9	Props	40
4.10	Storage	41
5	Applications	42
5.1	Anchors and climbing brackets.....	42
5.2	Connections (fasteners)	57
5.3	Climbing rails and vertical structure.....	62
5.4	Cladding	73
5.5	Platforms.....	86
5.6	Rubber Covers.....	91
6	Levels and naming conventions.....	94
6.1	SAFESCREEN G2 unit levels.....	94
6.2	Naming convention	95
7	Typical configurations.....	96
7.1	Rails	96
7.2	Cladding	97
7.3	Platforms.....	101
7.4	Loading platform	102
7.5	Ladder access.....	103
7.6	Sealing the units.....	103
8	Typical solutions.....	104

8.1	Combination of SCR Slab Edge Bracket and SCR Slab Top Bracket	104
8.2	Circular slab edges.....	105
8.3	Column formwork at slab edge.....	105
8.4	Balconies.....	106
8.5	Corners	107
8.6	Offsets and openings.....	108
8.7	Other	108
9	Assembly	109
9.1	Safety and working area	109
9.2	Assembly of the rails and truss setup.....	111
10	Lifting and transportation	141
10.1	General notes on lifting and transportation	141
10.2	Lifting.....	141
10.3	Transportation.....	143
10.4	Delivery / return typical check list	144
10.5	Securing the extendable units.....	145
11	Installing the SAFESCREEN G2 units	146
12	Climbing.....	157
12.1	Operating the SAFESCREEN G2 unit hydraulically.....	157
12.2	Climbing cycle.....	157
12.3	Pre-climbing checks	161
12.4	Post-climbing checks	168
13	Removing the unit	169
14	Maintenance and repairs.....	169
15	Notes on structural analysis	170
15.1	Loads.....	170
15.2	Relevant codes	170
16	Chronology.....	171

1 Product information

1.1 System features

SAFESCREEN G2 is a suspended, self-climbing system that offers access and full edge protection to a number of levels. It is designed to be used in line with the construction of concrete slabs; however, it is independent of formwork and falsework equipment. The shuttering work on tall structures can be carried out without the need of a scaffold or crane and with reduced input of labour and materials. The system provides a safe working environment for the site personnel against adverse weather conditions, falls from height and also provides protection to local services and public areas against danger of falling objects and pollution from site.

Typically, the system climbs vertically, following the newly constructed levels, and can be used on inclined facade (maximum inclination is $\pm 5^\circ$) or irregular buildings.

The hydraulic climbing gear ensures smooth climbing, irrespective of the loading of the individual brackets.

SAFESCREEN G2 can be assembled on site or where there are working area restrictions, pre-assembled and delivered. Units can be assembled with re-usable bolted modular components.

SAFESCREEN G2 units can either be single rail or truss units, with platforms for access and typically covered with panels for protection. The platforms provide access areas for safe concreting, re-bar installation and protection of falling of people, objects and debris. The distance between the support brackets and the width of the SAFESCREEN G2 unit depend mainly on the building's geometry, height and site conditions. Additionally, units can be adjusted on the structure to accommodate irregular structure shapes.

Principles:

- Wind protection
- Edge fall protection
- Prevention of dropping tools and materials
- Provides edge protection for slab formwork

Available features:

- Several cladding types available.
- Adjustable cladding panels
- Folding platforms
- Self-climbing
- Simple to assemble and install
- Configurable for standard transport (in accordance with relevant road regulations)
- Used on reinforced concrete, post-tension and pre-cast slabs

1.2 Intended use

The SAFESCREEN G2 system is intended to provide a collective means of edge protection on concrete slab's leading edges. It is used to prevent falls from height, and it must not be used as an attachment point for harnesses.

2 General notes about formwork systems

2.1 Information regarding intended and safe use

2.1.1 Design

Design Risk Assessment

The Design Risk Assessment is an integral part of Hünnebeck's design process. The designer will assess the hazards and risks associated with erection, use and dismantling of the temporary works at an early stage of the design process.

Hünnebeck will communicate where risks to health and safety remain by including a „Residual Risk Note“ on the drawing. This note will be clearly visible and marked by the familiar black exclamation mark on a yellow triangle. The statement will be brief but clear to enable appropriate action by a competent contractor.

Planning

The structures must be dimensioned, set up, supported, propped, tied and designed such that all loads resulting from the intended use can be supported and transferred.

The installation schedule shall be determined in advance, during technical planning of the project. The system must be planned such that activities that pose a risk of falling are avoided and, if the risk is unavoidable, its occurrence is kept to a minimum.

All materials required at the site shall be available in sufficient quantities, in flawless condition, and easily accessible.

If the date and location of work coincides with the scheduled work of other contractors, these contractors shall be consulted and the work coordinated to avoid jeopardising each other's work.

Design schemes

Where relevant site-specific design schemes are produced, they will generally be to a recognised standard arrangement. Otherwise calculations will be done to verify the design.

2.1.2 Moving the equipment

The contractor shall ensure that components, building materials and work equipment are stored, moved, transported, and installed such that they cannot unintentionally shift.

Transport

The special requirements of the system either as individual components and/or as pre-assembled parts regarding transportation procedures must be complied with. This applies not only to and from the site but also to the movement of individual components and/or pre-assembled parts on the construction site/place of use.

Lifting

All relevant regulations regarding lifting materials using mechanical means must be complied with.

When applicable, the lifting requirements of the individual components and/or pre-assembled parts must be followed.

2.1.3 Delivering and storing the equipment

Material check and inspection of components

Material deliveries are to be checked on arrival at the construction site/place of destination, as well as before each use, to ensure it is in serviceable condition and functions correctly. Changes to the material are not permitted.

- **Damaged components:**
Damaged components should be identified, clearly labelled and isolated (“quarantined”). They shall not be included and/or mixed with components that are in good condition and are fit for use.
- **Spare parts and repairs:**
Only original components may be used as spare parts. Repairs are to be carried out by the manufacturer or by authorised facilities only.
- **Disposal:**
Destroyed parts or parts that can no longer be repaired shall be disposed of by a specialised company certified according to local regulations. Information on the materials used are available upon request.

The contractor shall ensure that destroyed or damaged components are no longer used and that the appropriate environment and conditions for storage and the particular application of the system(s) are supplied.

Using other products

Combining components from different manufacturers carries certain risks and is not permitted.

2.2 On-site safety general notes

Hazard assessment

The contractor is responsible for the compilation, documentation, implementation and revision of a hazard assessment for each construction site. The hazard assessment contains the assessment of the working conditions as they relate to potential danger to the employees. The contractors shall implement appropriate safety measures and ensure the compliance with and the effectiveness to prevent the potential hazards determined by the assessment.

The hazard assessment serves as a starting point for effective, targeted occupational safety measures. Document the results of the hazard assessment. The employees are obligated to implement the resulting measures as required by law.

Assembly instructions

The contractor is responsible for compiling a written set of assembly instructions. The instructions shall contain all of the information required to ensure that all tasks are performed safely. The hazard assessment and the user guide can be used to help compile the assembly instructions.

Personnel qualifications

Technical work equipment is intended for commercial use only. The equipment shall be used only by properly trained personnel under the authority of qualified supervisors, appointed by the contractor. The supervisors shall ensure that any work it is carried out safely.

Personnel shall be briefed on relevant hazards related to the specific equipment and be familiar with the user guide.

On-site preparations

The contractor shall ensure that the ground (erection surface) is stable and can bear the load of the constructions (e.g. formwork and falsework, auxiliary structures) throughout every stage of construction. This also includes basic assembly, dismantling, transport and moving of components and the inspection of the entire structure during and upon completion of assembly.

Hazardous areas shall be clearly visible during the entire working process. Openings in planks, slabs and roofs, as well as in the depressions, shall be secured with protective equipment and covers to prevent persons from falling off the platforms, into or stepping into the openings. Secondary fall protection can also be installed.

Covers shall be secured to prevent unintentional motion. All connectors shall be tight and, if necessary, re-tighten before every use and every time they are moved.

The contractor is responsible for keeping persons out of work areas and walkways where there is a risk of objects falling as well as for installing protection from falling objects.

Monitoring wind and temperature conditions

The contractor is responsible for monitoring the weather forecast/wind conditions and take the required preventive measures. This includes but is not limited to installation of additional safety measures.

Depending on the local conditions, (e.g. the surrounding area, structure height and building geometry) safety measures to prevent the structure from uplift, possibly even dismantling the system, may be required and should be determined on site.

Personal protective equipment (PPE)

It is essential to always wear PPE, with safety footwear S3, hard hat, hi-vis vest, gloves and safety glasses, when working. When working with hazardous substances, always check if less dangerous substitutions can be used instead.

Work at height

Work at height can be reduced / eliminated by considering the method of assembly and use:

- Walkways that are designed to be re-used, reduce the amount of time and effort dismantling and re-erecting;
- Walkways that can be pre-assembled on the ground and then raised by crane to an elevated position will remove some of the work at height;
- Installing completed walkways when the walkway is on the ground will remove work at height associated with the construction later on.

Measures to prevent falls from heights are mandatory when working more than 1.00 m off the ground. Side protection shall be installed when working near water, regardless of the working height.

Equipment and measures to prevent falling include side protection, working areas of adequate width (such as working platforms), fall protection devices (e.g. safety grating, protective or safety nets) or mobile scaffolds as well as personal fall protection.

Access points to working areas shall be equipped with protection (e.g. platform systems, ladders or staircase towers for specific systems) as intended by the manufacturer.

The need to work at height can be reduced by pre-assembling platform systems and walkway brackets on the ground and then raising them into place with a crane.

Personal fall protection

Personal fall protection shall always be provided and used when all other technical and organisational measures to prevent falls (e.g. nets) have been exhausted and there is still a risk of injury that could be minimised by using fall protection. Personal fall protection shall be suitable for the application and shall be inspected at least once a year.

Before the personal fall protection can be used, the responsible contractor is obligated to.

- Evaluate the risks in the course of a hazard assessment, to be able to implement effective, preventive measures.
- Develop a rescue plan and verify its effectiveness.
- Properly instruct and train the users of personal fall protection.

The proper personal fall protection depends on the hazard assessment. Suitable attachment points are required. The proper attachment points and equipment shall be determined for each individual case by a qualified supervisor authorised to give instructions.

2.2.1 Safety during assembly and use

Protective measures during work

Hazardous areas shall be clearly visible during the entire working process. Openings in planks, slabs and roofs, as well as in the depressions, shall be secured with protective equipment and covers to prevent persons from falling off the platforms, into or stepping into the openings. Secondary fall protection can also be installed. Secure covers to prevent unintentional motion.

All connectors shall be tight and, if necessary, re-tighten before every use and every time they are moved.

The contractor is responsible for keeping persons out of work areas and walkways where there is a risk of objects falling as well as for installing protection from falling objects.

The contractor is responsible for monitoring the weather forecast / wind conditions and take the required preventive measures. This includes but is not limited to installation of additional safety measures. Aggregation of snow, water or ice on the system and especially on the cladding and on the safety boxes has to be removed immediately to prevent overloading the system.

Tools and equipment

Only suitable and safe tools and equipment shall be used. Ensure that they are used as intended.

Assembly

Incorrect installation of components can lead to a risk of falling due to component failure.

Components shall only be installed as described and illustrated in this user guide. Alternatives shall be verified by means of a suitable risk assessment.

Disassembly

Incorrect disassembly can lead to a risk of falling due to the failure of the structure. Components are only to be disassembled as described and illustrated in this user guide. Alternatives are to be verified by means of a suitable risk assessment.

Stripping

Before stripping, it is essential to verify that the concrete is sufficiently strong.

When stripping, the formwork has to be adequately tied or braced until the formwork panels have been attached to the hoisting gear. Formwork panels shall never be torn off by crane.

2.2.2 Laws and regulations

For the safety-related application and use of the products, all current country-specific laws, standards and other safety regulations shall be complied with, without exception. They form a part of the obligations of employers and employees regarding occupational and industrial safety.

Hünnebeck draws attention to the following Health and Safety legislation:

- The Construction (Health, Safety and Welfare) Regulations 1996 (CHSW Regs);
- Construction (Design and Management) Regulations 2015 (CDM Regs);
- Lifting Operations and Lifting Equipment Regulations 1998 (LOLER);
- Work at Height Regulations 2005 (WaH Regs);

- Manual Handling Operations Regulations 1992 (MHO Regs).
- The Personal Protective Equipment at Work Regulations 1992 (PPE Regs)

Other local regulations may be relevant and shall always be considered.

2.3 About this user guide

This user guide contains important information regarding the assembly and use of the SAFESCREEN G2 system. These instructions are created to support effective working processes on site when using the SAFESCREEN G2 system, therefore carefully read this user guide before assembly and use of the system, always keep it at hand and archive it for future reference.

The user guide is an integral component of the formwork construction. It contains safety notes, information on the standard configuration, the intended use and a description of the system. Carefully follow the instructions on use and assembly of the equipment (standard configuration) contained in the user guide. Enhancements, deviations or changes represent a potential hazard and therefore require separate verification or a set of assembly instructions which comply with the relevant laws, standards and safety regulations. The same applies in cases where formwork components are provided on site.

The contractor has to ensure that the user guide is readily accessible on site and that employees are familiar with the user guide before assembling or using the equipment.

It is the responsibility of the site Management/Supervisors to ensure that all operatives involved in the assembly of the formwork system have been made aware of this document and that they understand the drawings (if supplied) and the function of the various components. The contractor is also responsible for drawing up a comprehensive risk assessment and a set of installation instructions. The latter is not usually identical to the assembling instructions.

Hünnebeck can provide further guidance and on-site assistance on any issues contained in this document that are not clear. Further information can be found in the product's data sheets. IF IN DOUBT, ASK.

Representations

The representations shown in the assembly instructions are in part, situations of assembly and not always complete in terms of safety considerations. The safety installations which have possibly not been included in these representations must be available and must be in accordance with the latest regulations. Safety devices may not always appear in the illustrations, but they are nevertheless mandatory.

Overviews and diagrams are for illustrative purposes only and whilst we endeavour to ensure accuracy, we are not responsible for omissions or errors.

The details do not serve as absolute requirements. Based on the hazard assessment it might be necessary to implement essential preventive measures. The specifics of each case must always be taken into consideration.

Some of the illustrations in the assembly instructions show various states of assembly and are not always complete in terms of safety considerations. We explicitly reserve the right to make changes resulting from technical improvements.

Genuine components

The information provided assumes that any product combinations will be between genuine Hünnebeck products or products supplied by Hünnebeck unless otherwise stated. Combining components from different manufacturers carries certain risks.

Any unauthorised use in relation to third party products could give rise to a risk of collapse, damage, injury or death.

Miscellaneous

We explicitly reserve the right to make changes resulting from technical improvements. For the safety-related application and use of the products, all current country-specific laws, standards and other safety regulations shall be complied with, without exception. They form a part of the obligations of employers and employees regarding occupational and industrial safety.

2.3.1 Warnings and notes

 DANGER	Danger! DANGER indicates a hazardous situation that, if not avoided, will cause death or serious injury.
 WARNING	Warning! WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Caution! CAUTION indicates a hazardous situation that, if not avoided, can cause minor or moderate injury.
NOTE	Note! NOTE indicates a hazard that can cause property damage.
	This symbol indicates that an additional inspection is required.
	This symbol indicates practical experience that will help the user, e.g. how to perform a task more easily or more quickly.
	This symbol indicates particularly important information, e.g. that a requirement shall be met.
	This symbol indicates that additional information from other documents is required. These documents could be user guides or operating instructions for other products.

2.3.2 Instructions

In this document, instructions are always identified with the word “Step”, e.g.

- Step 1** Insert the locking bolt into the hole from the outside.
- Step 2** Secure the pin with the spring cotter pin.

2.3.3 Brand names

The following brand names are the property of Hünnebeck. The symbol indicating a registered trademark is omitted throughout the document.

- Hünnebeck®
- SAFESCREEN®
- INFRA-KIT®
- EUROPLUS®
- DU-AL®
- Aluma beams®

2.4 Other relevant documents

This user guide should be read in conjunction with the following documents:

User guides

- INFRA-KIT
- DU-AL
- EUROPLUS^{new}

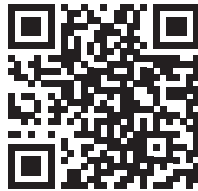
Operating instructions

- SCF 60/SAFESCREEN G2

Product information

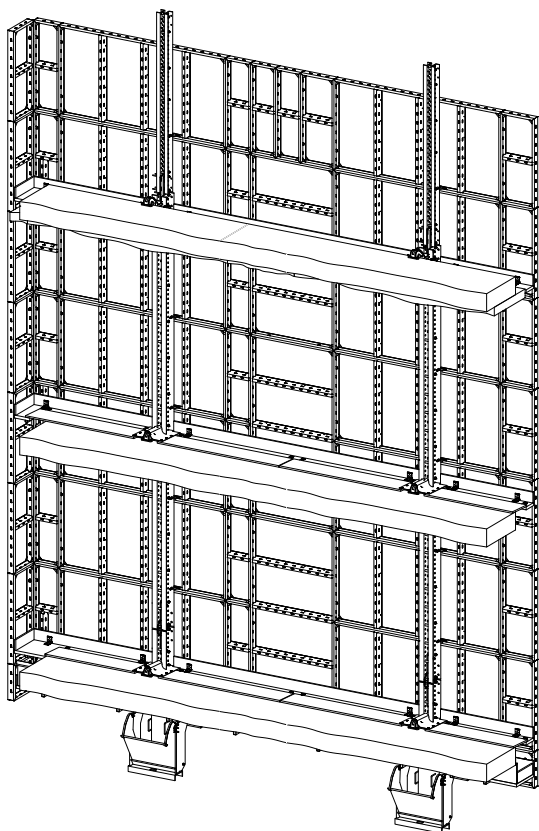
- Euro Lattice Boxes
- Euro Trolley

All of these documents can be downloaded from <https://www.huennebeck.com/downloads>.

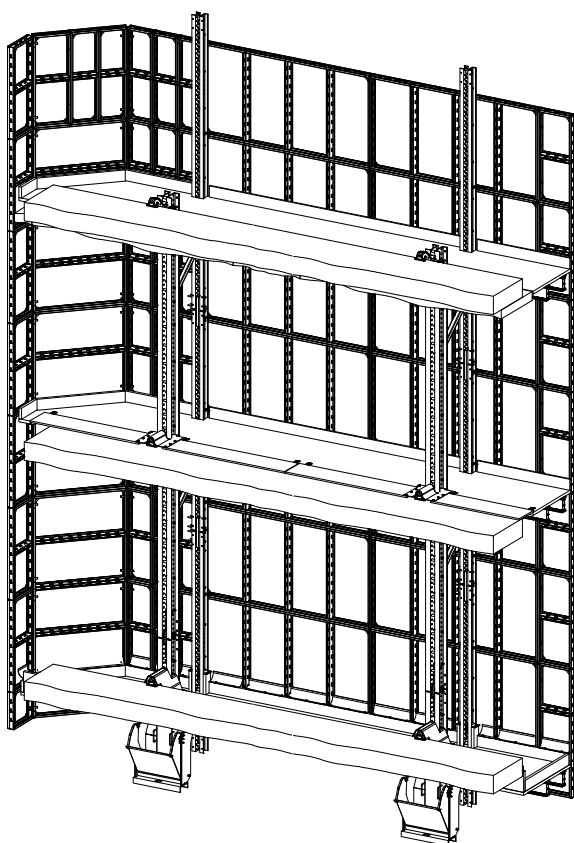


Lyndon SGB, Hünnebeck, Aluma and Brand are trading names of BrandSafway.

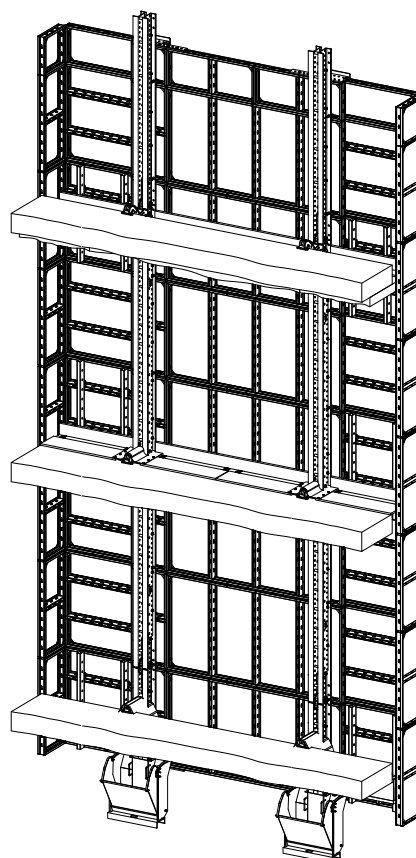
3 Overview



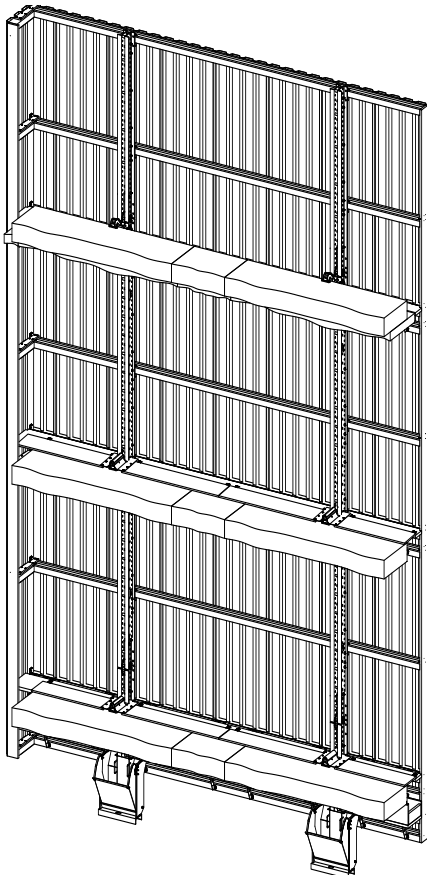
Single rail setup, fixed width unit
Cladding made of rentable cladding panels



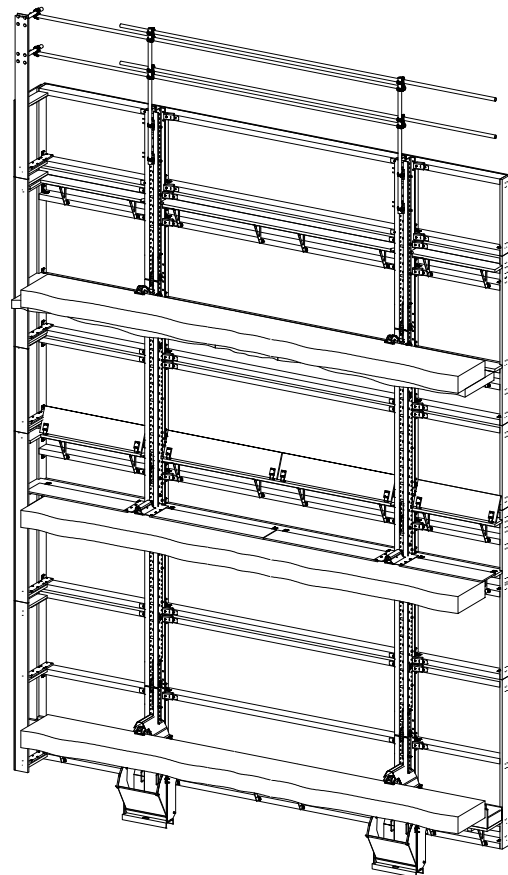
Truss setup, fixed width unit
Cladding made of rentable cladding panels
(see page 97)



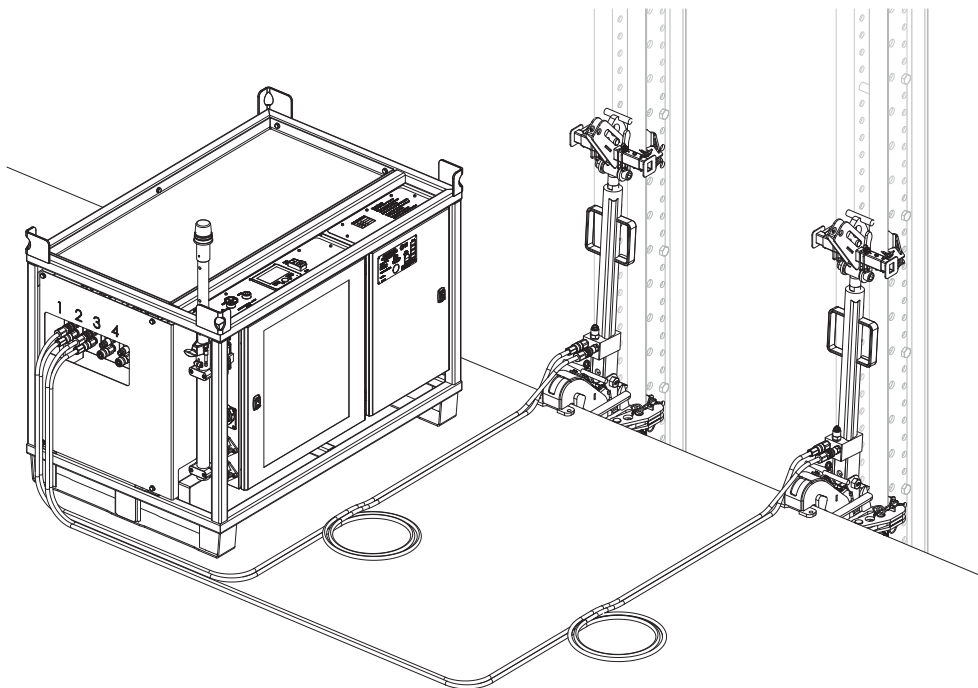
Single rail setup, extendable width unit
Cladding made of rentable cladding panels
(see page 98)



Single rail setup, fixed width unit
Cladding made of rentable timber and corrugated sheet (see page 100)



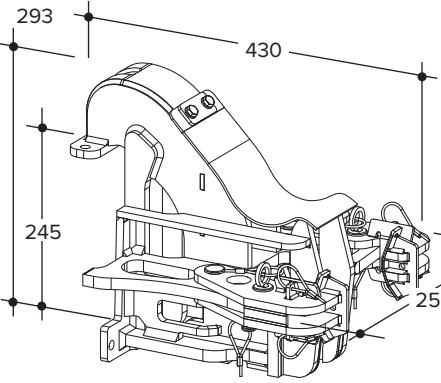
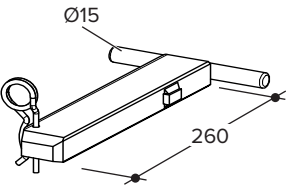
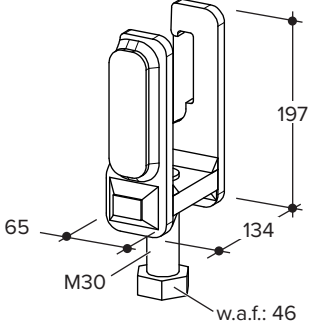
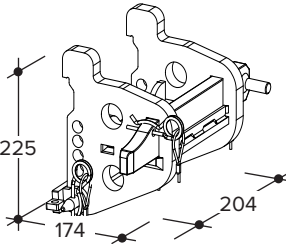
Single rail setup, fixed width unit
Cladding made of rentable timber panels with height extension (see page 99)

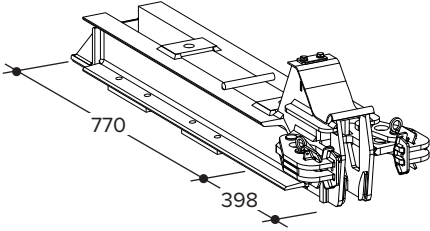
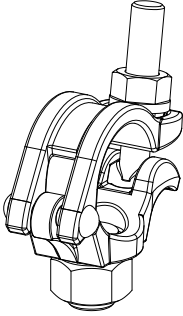
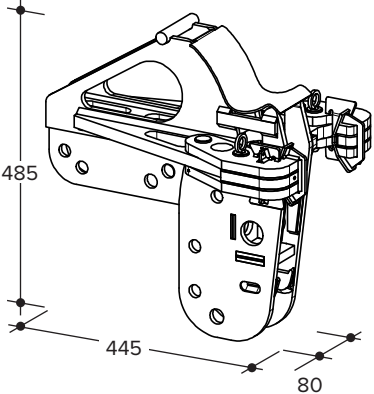
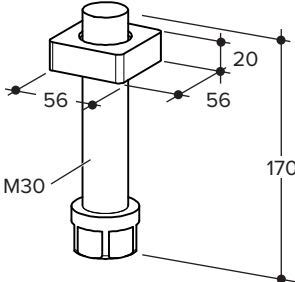


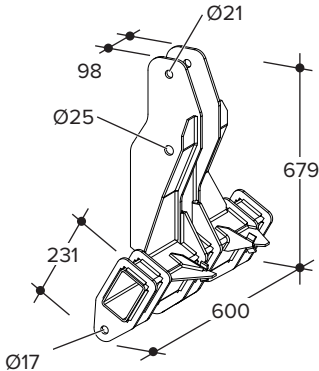
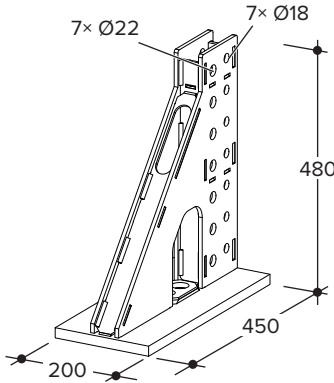
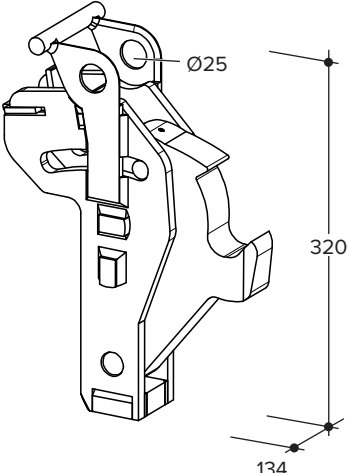
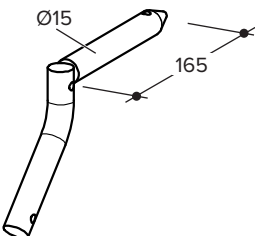
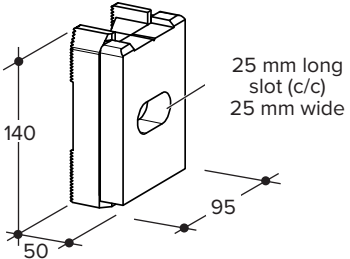
Setup with climbing gear
(see operating instructions for the SCF 60/SAFESCREEN G2 climbing gear)

4 Components

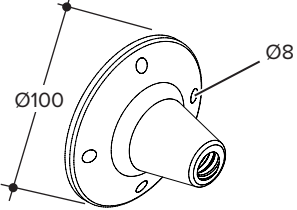
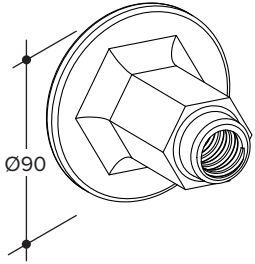
4.1 Climbing brackets and anchors

	Component	Code	Weight [kg]
	SCR Slab Edge Bracket Used on concrete slab edges, these brackets are connected to the Anchor Block M24. The Bracket Claw Unit is inserted into the SCR Slab Edge Bracket and together they support the SAFESCREEN G2 unit. The brackets transfer vertical and horizontal loads to the permanent structure. Minimum slab thickness is 250 mm. See page 45.	611170	24.89
	SCR Slab Edge Bracket Securing Bar Inserted into the SCR Slab Edge Bracket (code: 611115) to prevent accidental uplift (the Anchor Bolt M24x100-10.9 will act as a stopper against the SCR Slab Edge Bracket Securing Bar). It is also used to secure the SCR Slab Edge Bracket Support in place. See page 47.	611230	2.64
	SCR Slab Bracket Height Adjustment Used with the SCR Slab Edge Bracket (code:611170) and the SCR Slab Top Bracket (code:611510) to vertically adjust the position of the Bracket Claw Unit (code:61111). Adjustment range is 40 mm. See page 47.	611205	4.56
	SCR Slab Edge Bracket Support Used to increase the vertical load capacity of the SCR Slab Edge Bracket (code:611170). Used in conjunction with the SCR Slab Edge Bracket Securing Bar (code:611230). Minimum slab thickness >280 mm. See page 48.	611725	13.77

	Component	Code	Weight [kg]
	SCR Slab Top Bracket Used on the top face of concrete slab edges, these brackets are anchored into the concrete using a suitable M24 anchor. The Bracket Claw Unit (code:611115) is inserted into the SCR Slab Top Bracket and together they support the SAFESCREEN G2 unit. The brackets transfer vertical and horizontal loads to the permanent structure. See page 49.	611510	51.58
	Half Coupler 48/M20x30 w.a.f. 22/30 Used in conjunction with the SCR Slab Top Brackets (code:611510) to attach horizontal restraint.	2488	
	SCF 60 IK Waler Bracket To be used in conjunction with an IK Waler L or an IK Waler M for special anchoring positions. It is attached to an IK Waler L or an IK Waler M (ordered separately). See page 51.	611710	32.54
	SCF 60 Wall Bracket Height Adjustment Used with the SCF 60 IK Waler Bracket (code:611710) to vertically adjust the position of the Bracket Claw Unit (code:611115). Thread not shown. Adjustment range is 40 mm. See page 55.	611210	1.43

	Component	Code	Weight [kg]
	SCF 60 IK Waler Bracket Support Allows struts to be attached from the slab below, enabling the SCF 60 IK Waler Bracket to be supported in situations where the IK Waler cannot be fully supported vertically by the permanent structure, e.g. cantilevered walers. See page 53.	611730	29.86
	IK Waler Support Used to anchor an IK Waler to a concrete slab. See page 54.	611740	21.63
	Bracket Claw Unit Inserted into a SCR Slab Edge Bracket (code:611170), a SCR Slab Top Bracket (code:611510) or a SCF 60 IK Waler Bracket (code: 611710). The Bracket Claw Unit is made primarily of a main body, a spring-loaded mechanism to secure the unit to a bracket, and the spring-loaded retractable claw to connect to the Bolt Sleeve Ø30 (code: 611720) on the rail of the SAFESCREEN G2 unit. See page 42.	611115	8.97
	Bracket Claw Lock Used to lock the claw of the Bracket Claw Unit in position to prevent accidental uplift. See page 42.	611380	0.45
	Anchor Block M24 Used to connect the Anchor Cone M24/DW15 (code:496664) to the climbing brackets. The Anchor Block M24 is attached to the Anchor Cone M24/DW15 using the Anchor Bolt M24x100-10.9 (code:611218). See page 43.	611220	2.98

	Component	Code	Weight [kg]
	Anchor Cone M24/DW15* Re-usable part. Cast into the concrete, the cones will provide anchoring points for the SAFESCREEN G2 units. The outer connection provides an M24 thread, and the inner connection provides a DW15 thread to connect to a lost anchor in the concrete. See page 43.	496664	0.65
	Anchor Cone M24/DW20* Re-usable part. Cast into the concrete, the cones will provide anchoring points for the SAFESCREEN G2 units. The outer connection provides an M24 thread, and the inner connection provides a DW20 thread to connect to a lost anchor in the concrete.	611860	1.13
	Anchor Bolt M24x100-10.9 Used with the Anchor Cone M24/DW15. The Anchor Bolt M24x100-10.9 is grade 10.9 and galvanised to ISO 4762. See page 43.	611218	0.50
	Fit Bolt M24x70 Z 8.8 Used to fix the advancing cone to the plywood of the slab edge formwork. Requires drilling a Ø26 hole through the plywood.	185635	0.47
	Cylinder Head Bolt M24x70 10.9 Cylinder Head Bolt M24x80 10.9		
	Nailable Disk M24 Nailed to the plywood to secure the anchor cone during concrete pouring. A 14 mm Allen key is required for disassembly.	515947	0.16
	Tie Rod DW15 per meter Lost anchoring part. It is cut to length on site and is embedded into the concrete together with the Collar Nut DW15 (code:602091) and the Anchor Cone M24/DW15 (code:496664). See page 43.	164811	1.44

	Component	Code	Weight [kg]
	Collar Nut DW15	602091	0.90
	Lost anchoring part. Used with the tie rod as anchoring. See page 43.		
	Collar Nut DW20	611299	0.85
	Lost anchoring part. Used with the tie rod as anchoring.		

4.2 Power unit and hydraulics

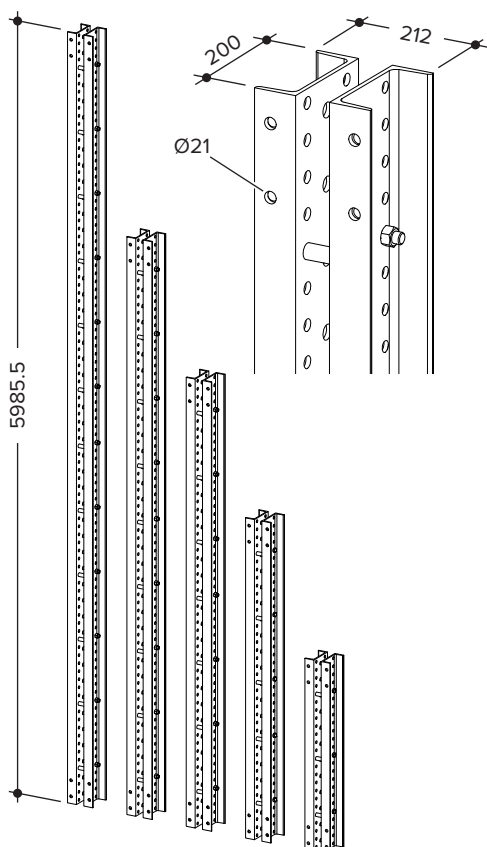


For information regarding the SCF 60/SAFESCREEN G2 Climbing Gear, refer to the separate Original Operating Instructions!

4.3 Rails, connectors and ancillaries

4.3.1 IK Walers and fasteners

	Component	Code	Weight [kg]
	For more information regarding the INFRA-KIT Heavy-duty shoring system, refer to the separate User Guide!		

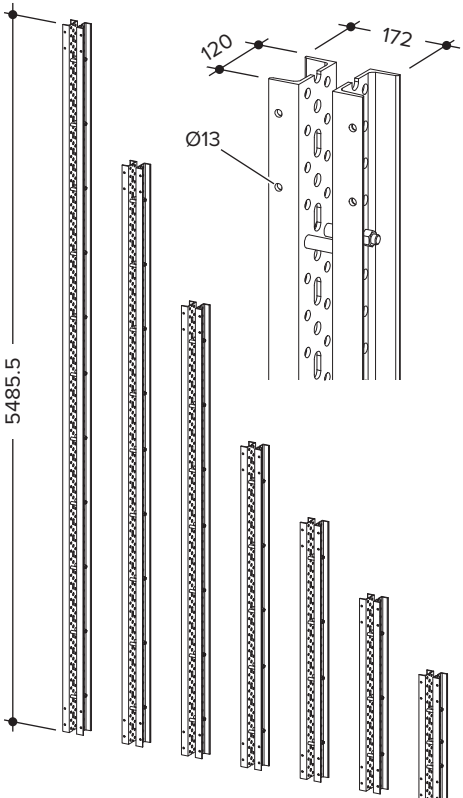


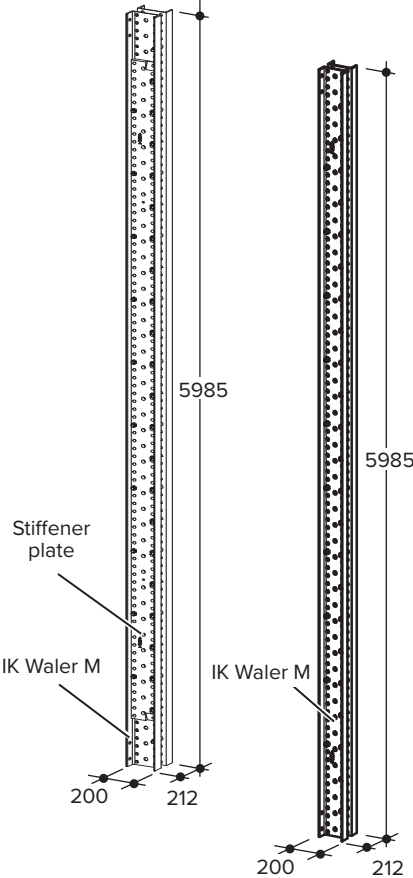
IK Waler M 600	608660	298.31
IK Waler M 550	608655	267.69
IK Waler M 500	608650	248.41
IK Waler M 450	608645	223.46
IK Waler M 400	608640	198.52
IK Waler M 350	608635	173.57
IK Waler M 300	608630	148.63
IK Waler M 250	608625	123.68
IK Waler M 200	608620	98.74
IK Waler M 150	608615	73.79

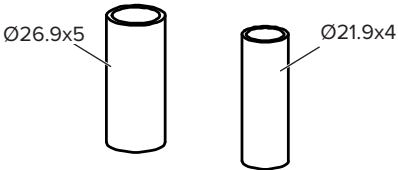
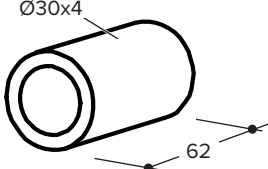
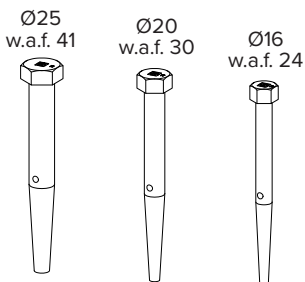
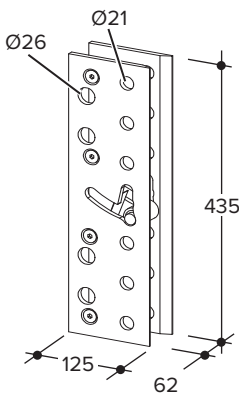
Main component of the INFRA-KIT M system.

The walers are used as structural members of the SAFESCREEN G2 units.

See page 57.

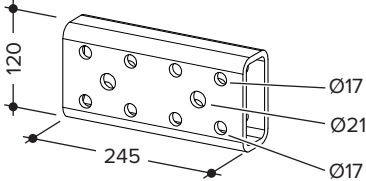
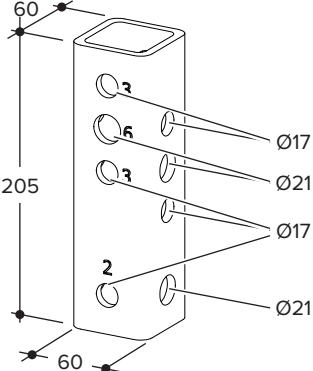
	Component	Code	Weight [kg]
	IK Waler L 550	608755	140.75
	IK Waler L 500	608750	127.92
	IK Waler L 450	608745	115.09
	IK Waler L 400	608740	102.25
	IK Waler L 350	608735	89.42
	IK Waler L 300	608730	76.58
	IK Waler L 250	608725	63.75
	IK Waler L 200	608720	50.91
	IK Waler L 150	608715	38.08
	IK Waler L 125	608712	31.73
	IK Waler L 100	608700	25.39
	IK Waler L 75	608688	18.90
	IK Waler L 62,5	608658	15.72
	Main component of the INFRA-KIT L system.		
The walers are used as structural members of the SAFESCREEN G2 units.			
See page 57.			

	SCR Climbing Rail HD 6 m	612205	675.77
	SCR Climbing Rail 6 m	612075	312.20
	Pre-assembled structural member made of an IK Waler M.		
	The SCR Climbing Rail HD 6 m has a bolted stiffener plate on both faces.		

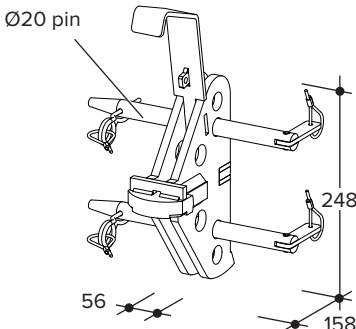
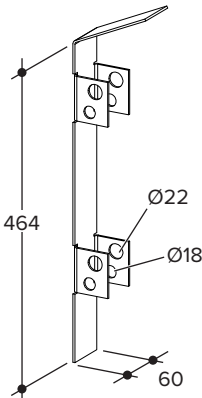
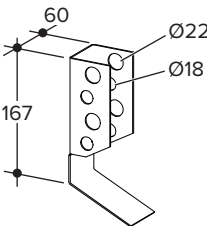
	Component	Code	Weight [kg]
	Spacer Sleeve IK Waler L *	608496	0.05
	Spacer Sleeve IK Waler M *	608498	0.10
	Bolt Sleeve Ø30 The Bolt Sleeve Ø30 is attached to the web of the IK Walers M and is used by the climbing brackets to support the main rails. Also used as a lifting point for the SAFESCREEN G2 unit. Coloured red for visual identification.	611720	0.17
	IK Pin Ø16	608816	0.31
	IK Pin Ø20	608820	0.49
	IK Pin Ø25	608825	0.78
	Used to connect some ancillary to the IK Walers. Always secure with Spring Cotter Pins. See page 57.		
	Spring Cotter Pin Ø4 Used to secure IK Pin Ø16 (code:608826) and IK Pin Ø20 (code: 60882).	173776	0.02
	Spring Pin Ø5 Used to secure IK Pin Ø25 (code:608825). See page 57.	174553	0.04
	Movable Support Bobbin Attached to the IK Walers M and used to support the unit, the bobbin is pushed aside to allow for the SCR Wind Latch to be installed. See page 63.	611820	6.56

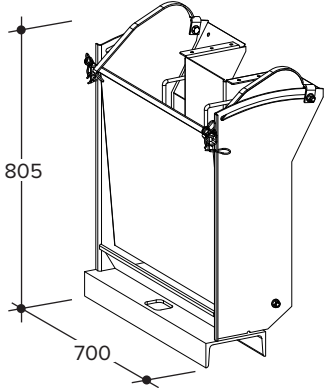
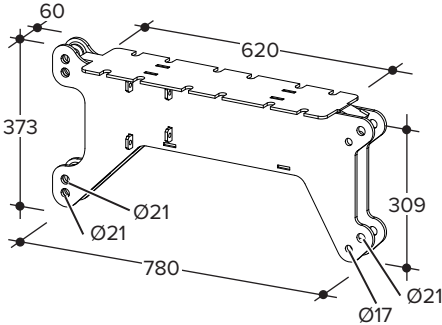
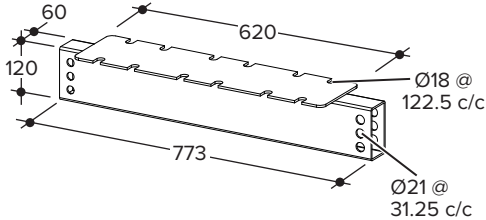
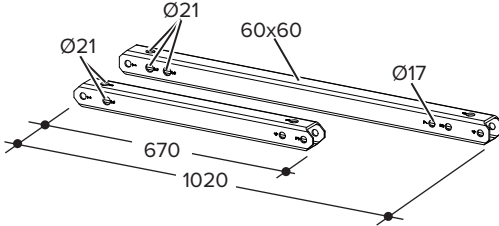
4.3.2 Connectors

	Component	Code	Weight [kg]
	SCR IK Rail Connector M Used to connect 2no. IK Walers M end-to-end. See page 64.	611970	21.81
	IK Rail Connector M/L Used to connect IK Walers M to IK Walers L end-to-end. See page 65.	611235	10.53
	IK Cross Connector M Allows IK Spindles to be attached to the web of the IK Waler M.	608470	11.45
	IK Cross Connector L Allows IK Spindles to be attached to the web of an IK Waler L.	608450	9.12
	IK Waler Connector Flex L Used to connect a loading platform to an IK Waler M.	608490	8.16

	Component	Code	Weight [kg]
	IK Waler Connector L 25	608445	5.15
	Used to connect a loading platform to an IK Waler L.		
	SCF 60 Cross Connector L	612210	1.96
	Used in the loading platform to connect 2no. IK Walers L crosswise or parallel, one on top of the other.		

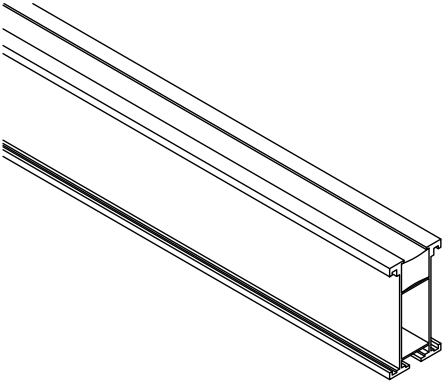
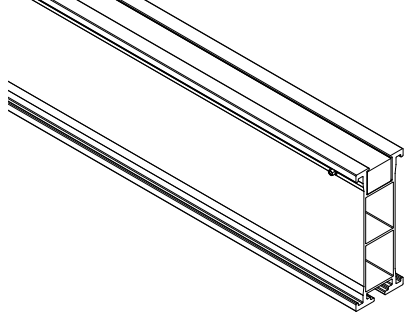
4.3.3 Ancillaries

	Component	Code	Weight [kg]
	SCR Wind Latch	611810	5.92
	Used to transfer high horizontal loads (normal to the facade) from the web of the IK Waler M into the climbing brackets. See page 66.		
	SCR Waler Sealing Plate long	611624	1.08
	Used to close the space between the profiles of the IK Walers. The SCR Waler Sealing Plate long guides debris to the SCR Safety Box. It is also used to prevent the over-climbing of the SAFESCREEN G2 unit.		
	SCR Waler Sealing Plate short	611882	0.43
	Used to close the space between the profiles of the IK Walers. The SCR Waler Sealing Plate short guides debris to the SCR Safety Box (code:611450).		

	Component	Code	Weight [kg]
	SCR Safety Box The SCR Safety Box is placed at the bottom end of the rail and is designed to collect small debris falling through gaps near the rail. During climbing operations, the SCR Safety Box must be manually retracted to avoid contact with concrete slabs. See page 68.	611450	67.66
	SCR Platform Beam 0.75 m rigid Used in the SAFESCREEN G2 truss units to support decking. The SCR Platform Beam 0.75 m rigid can also be used as a cantilivering platform beam. See page 69.	612263	26.97
	SCR Platform Beam 0.75 m Used in SAFESCREEN G2 truss units to support decking. It usually requires the use of SCF 60 Diagonals (code: 612130) in the truss setup.	612260	12.32
	SCF 60 Diagonal 75x75 SCF 60 Diagonal 50x50 Part of the SAFESCREEN G2 truss units. Used to stiffen the assembly. The 75x75 and 50x50 dimensions refer to distance between the bolt connections (LxH). See page 70.	612130 612125	6.89 4.40

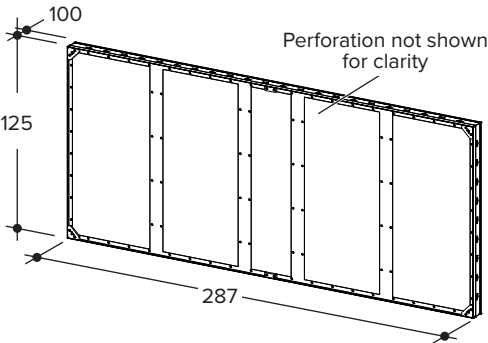
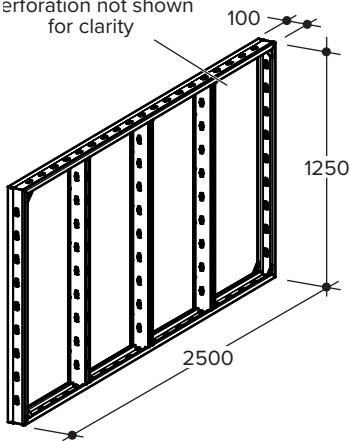
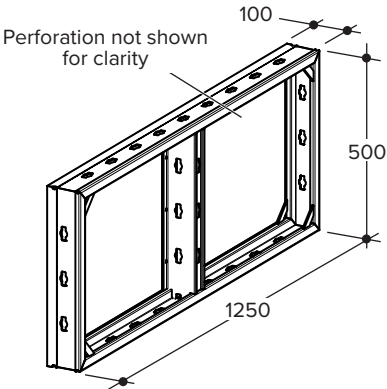
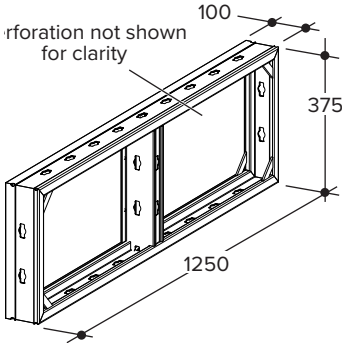


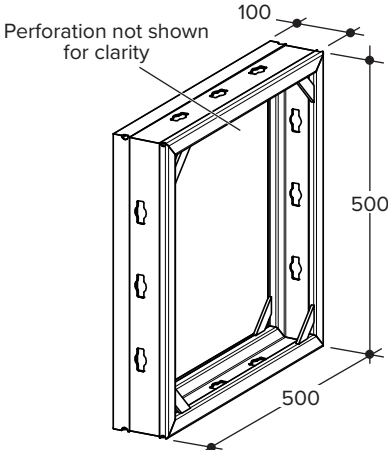
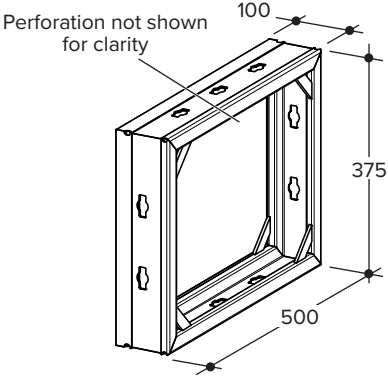
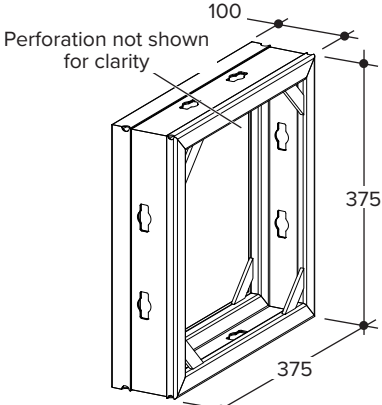
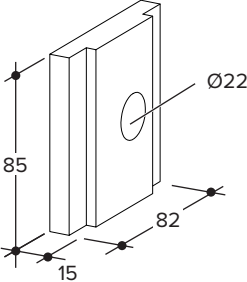
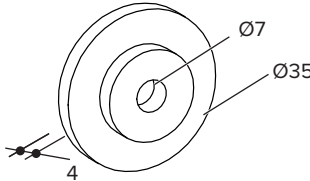
For more information regarding the DU-AL beams, refer to the separate User Guide!

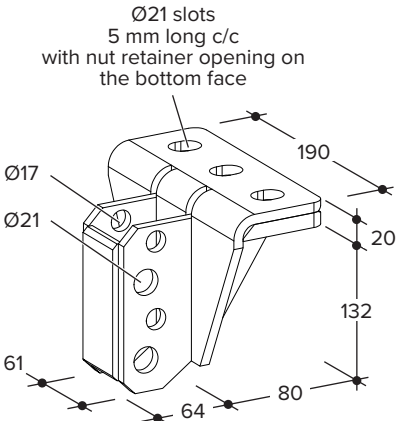
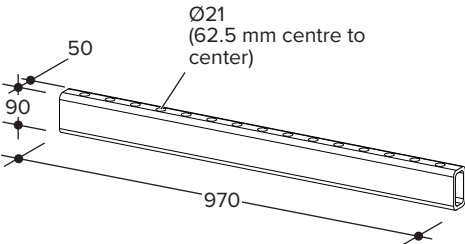
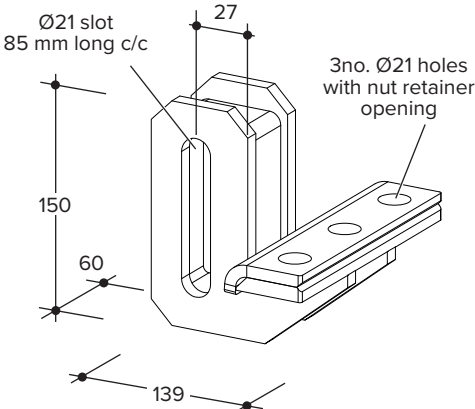
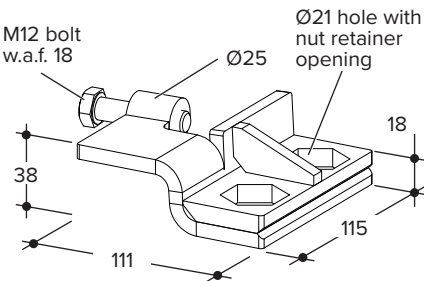
	Component	Code	Weight [kg]
	DU-AL T150 Beam 7.2 m	717572	28.52
	DU-AL T150 Beam 6.4 m	717564	25.40
	DU-AL T150 Beam 6.0 m	717560	23.82
	DU-AL T150 Beam 5.4 m	717554	29.69
	DU-AL T150 Beam 5.0 m	717550	27.49
	DU-AL T150 Beam 4.8 m	717548	26.39
	DU-AL T150 Beam 4.2 m	717542	23.09
	DU-AL T150 Beam 3.9 m	717539	21.44
	DU-AL T150 Beam 3.6 m	717536	19.79
	DU-AL T150 Beam 3.0 m	717530	16.49
	DU-AL T150 Beam 2.7 m	717527	14.84
	DU-AL T150 Beam 2.5 m	717525	13.74
	DU-AL T150 Beam 2.4 m	717524	13.19
	DU-AL T150 Beam 1.8 m	717518	9.89
	DU-AL T150 Beam 1.6 m	717516	8.79
	DU-AL T150 Beam 1.3 m	717513	7.14
	DU-AL T150 Beam 1.2 m	717512	6.59
	DU-AL T150 Beam 1.0 m ^{A)}	717510	5.49
	Used in truss rail SAFESCREEN G2 units to support decking. See page 100. ^{A)} Non-standard.		
	DU-AL T200 Beam 6.0 m	717260	45.41
	DU-AL T200 Beam 5.0 m	717250	37.84
	DU-AL T200 Beam 4.0 m	717240	30.28
	DU-AL T200 Beam 3.5 m	717235	26.50
	DU-AL T200 Beam 3.0 m	717230	22.71
	DU-AL T200 Beam 2.5 m	717225	18.93
	DU-AL T200 Beam 2.0 m	717220	15.15
	DU-AL T200 Beam 1.5 m	717215	11.37
	Used in truss rail SAFESCREEN G2 units to support decking. See page 100.		

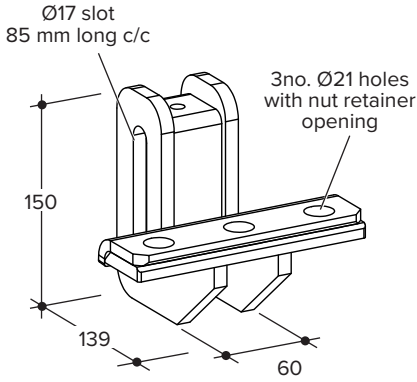
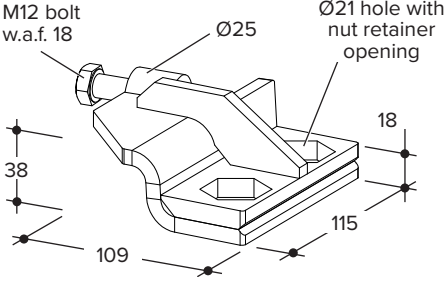
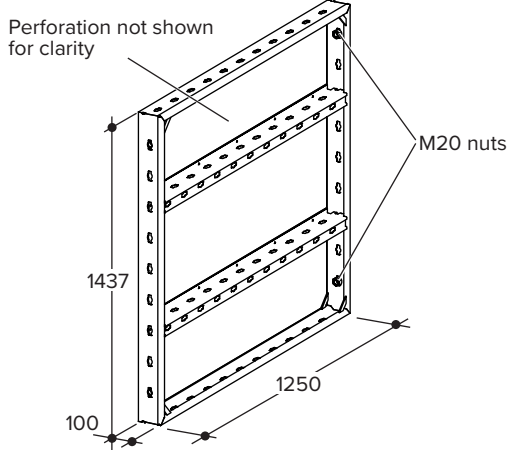
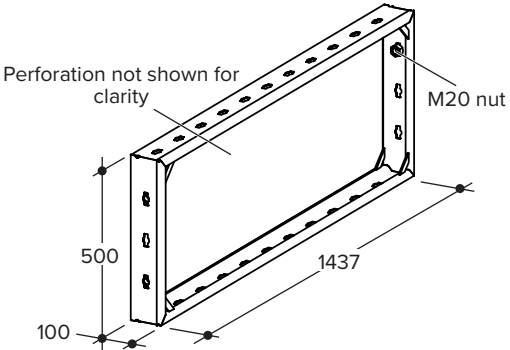
4.4 Cladding

4.4.1 Perforated panels and connectors

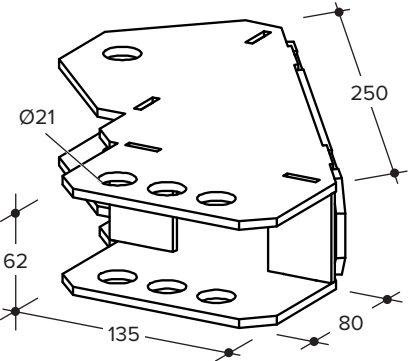
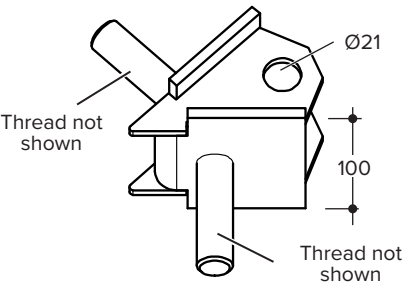
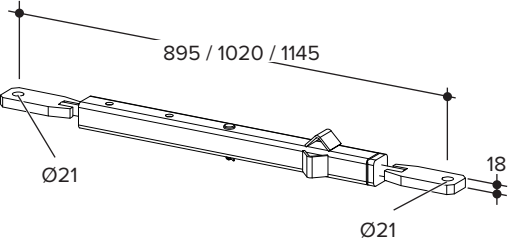
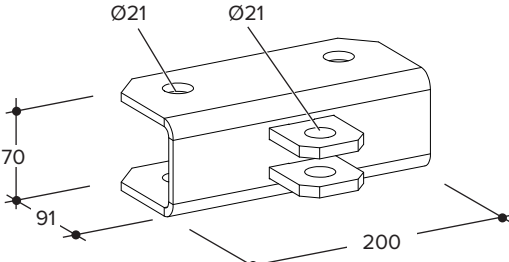
	Component	Code	Weight [kg]
	SCR Cladding Panel 287.5/125 Used to provide rentable cladding. Infill made of perforated steel sheet with a Ø6 mm hole pattern.	612430	59.35
	SCR Cladding Panel 250/125 Used to provide rentable cladding. Infill made of perforated steel sheet with a Ø6 mm hole pattern. See page 73.	611920	50.39
	SCR Cladding Panel 125/50 Used to provide rentable cladding. Infill made of perforated steel sheet with a Ø6 mm hole pattern. See page 73.	611921	17.17
	SCR Cladding Panel 125/37.5 Used to provide rentable cladding. Infill made of perforated steel sheet with a Ø6 mm hole pattern. See page 73.	611922	15.29

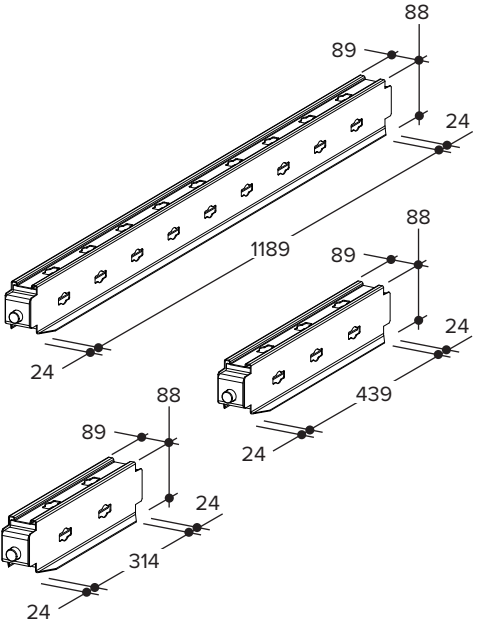
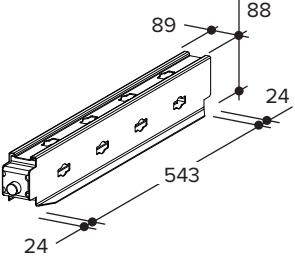
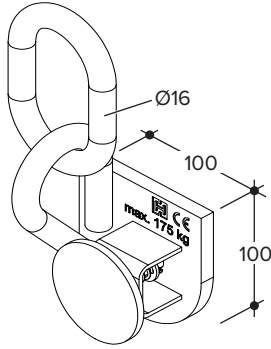
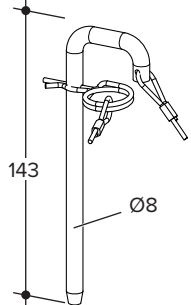
	Component	Code	Weight [kg]
	SCR Cladding Panel 50/50 Used to provide rentable cladding. Infill made of perforated steel sheet with a Ø6 mm hole pattern. See page 73.	611923	8.66
	SCR Cladding Panel 50/37.5 Used to provide rentable cladding. Infill made of perforated steel sheet with a Ø6 mm hole pattern. See page 73.	611924	7.50
	SCR Cladding Panel 37.5/37.5 Used to provide rentable cladding. Infill made of perforated steel sheet with a Ø6 mm hole pattern. See page 73.	611925	5.85
	SCR Panel Joint Reinforcement Plate Used to reinforce the bolted panel connections when necessary. Always use in pairs.	611903	0.69
	SCR Panel Deck Connection Washer Used to fix cladding panels to a timber or plywood deck.	611902	0.04

	Component	Code	Weight [kg]
	SCR Cladding Panel Bearing The SCR Cladding Panel Bearing is used to support panel cladding. See page 73. SWL*: $V = 18.00 \text{ kN}$ $H \perp = 9.00 \text{ kN}$ * when used in conjunction with the SCR Panel Bearing Spreader Beam	612056	4.79
	SCR Panel Bearing Spreader Beam Used with the SCR Cladding Panel Bearing (code: 612056) it helps to support the vertical loads of the cladding panels. See page 75.	612059	14.13
	SCR IK Web Cladding Panel Connector M Standard component used to connect the SCR Cladding Panels to the web of the IK Walers M. See page 77. SWL*: $H \perp = 6.00 \text{ kN}$ $H \parallel = 2.40 \text{ kN}$ * Component cannot carry any vertical loads.	611550	3.36
	SCR IK Flange Cladding Panel Connector M Alternative component used to connect the SCR Cladding Panels to the flange of the IK Walers M. Always use in pairs to form a staggered connection to the node. See page 76. SWL*: $H \perp = 6.00 \text{ kN}$ $H \parallel = 2.40 \text{ kN}$ * Component cannot carry any vertical loads.	611540	2.20

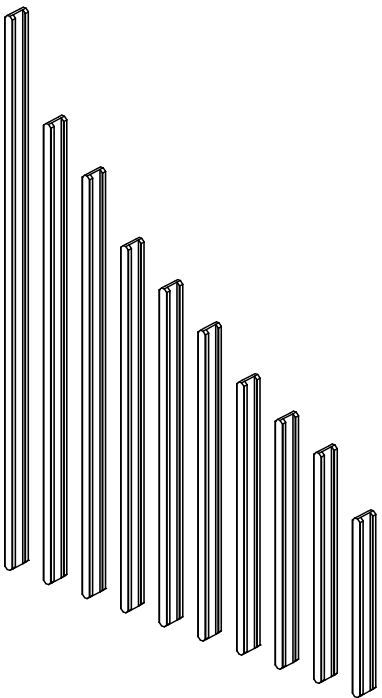
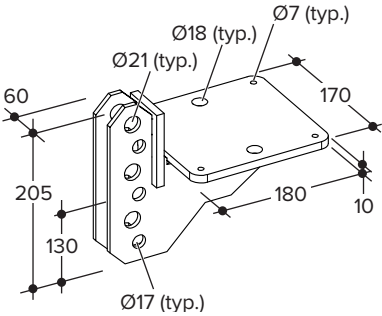
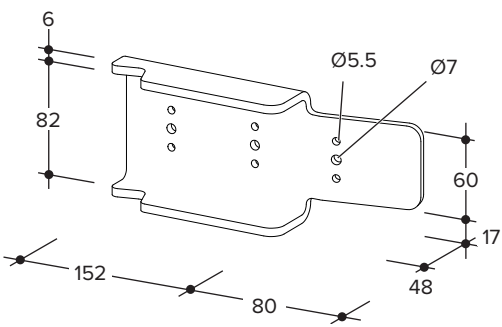
	Component	Code	Weight [kg]
	SCR IK Web Cladding Panel Connector L Standard component used to connect the SCR Cladding Panels to the web of the IK Walers L. See page 78. SWL*: $H \perp = 6.00 \text{ kN}$ $H \parallel = 2.40 \text{ kN}$ * Component cannot carry any vertical loads.	612216	2.79
	SCR IK Flange Cladding Panel Connector L Alternative component used to connect the SCR Cladding Panels to the flange of the IK Walers L. Always use in pairs to form a staggered connection to the node. This component can be differentiated from the SCR IK Flange Cladding Panel Connector M (code:611540) by the cut corner. See page 76. SWL*: $H \perp = 6.00 \text{ kN}$ $H \parallel = 2.40 \text{ kN}$ * Component cannot carry any vertical loads.	611545	1.27
	SCR Cladding Extension Panel 125/144 Used to provide cladding on extendable units. Infill made of perforated steel sheet with a Ø6 mm hole pattern. These panels are typically used for extensions and have welded M20 nuts on one side of the panel to allow for the fixing of the SCR Extension Panel Stopper. Please note orientation of panel as per supplied design scheme. See page 73.	611926	36.23
	SCR Cladding Extension Panel 50/144 See SCR Cladding Extension Panel 125/144 above.	611927	17.38

	Component	Code	Weight [kg]
	SCR Cladding Extension Panel 37.5/144 Used to provide cladding on extendable units. Infill made of perforated steel sheet with a Ø6 mm hole pattern. These panels are typically used for extensions and have a welded M20 nut on one side of the panel to allow for the fixing of the SCR Extension Panel Stopper. Please note orientation of panel as per supplied design scheme. See page 73.	611928	16.15
	SCR Extension Panel Bearing Used with extendable units, the SCR Extension Panel Bearing is positioned on the horizontal joint between the SCR Cladding Panels to allow for the extendable panels to slide. See page 79.	611962	18.76
	SCR Cladding Panel T-Spacer Used as a spacer between the SCR Cladding Panels at the returns and in the extendable panels. Use only in the designated positions shown in the supplied design scheme. See page 78.	611548	0.10
	SCR Extension Panel Stopper Used in extendable width SAFESCREEN G2 units as a safety feature to prevent extendable panels from over-extending. Not designed to take any loads. See page 80.	611966	1.66
	SCR Return Connector 90° The SCR Return Connector 90° allows 2no. cladding panels to be attached at right angles. The SCR Return Connector 90° is positioned on the outer side of the corner. If required, use 2no. SCR Panel Joint Reinforcement Plates (code:611903). See page 80.	611575	1.46

	Component	Code	Weight [kg]
	SCR Return Panel Connector adjustable 611620 3.64 The SCR Return Panel Connector adjustable allows 2no. cladding panels to be attached at right angles to create a return. The SCR Return Panel Connector adjustable is positioned on the inner side of the corner and attached to the inner profiles of the cladding panels. The SCR Return Panel Connector adjustable allows for the return panel to extend beyond the front facing panels (fly-past). An internal corner brace can also be attached to the SCR Return Panel Connector adjustable. See page 82.	611620	3.64
	SCR Return Connector 45° 611615 1.21 The SCR Return Connector 45° allows to attach two cladding panels at a 45° angle to create a return. The SCR Return Connector 45° is positioned on the inner side of the corner and attached to the inner profiles of the cladding panels using the incorporated M20 threads (thread not shown) on both faces. If required, use 2no. SCR Panel Joint Reinforcement Plates. See page 82. SWL: V = 0.60 kN H = 9.00 kN BM = 0.45 kN	611615	1.21
	SCR Return Panel Brace 612245 12.45 Used to brace the return panels. See page 83.	612245	12.45
	SCR Return Panel Brace Connector 612240 2.27 Used in conjunction with SCR Return Panel Brace to brace the return panels. See page 84.	612240	2.27

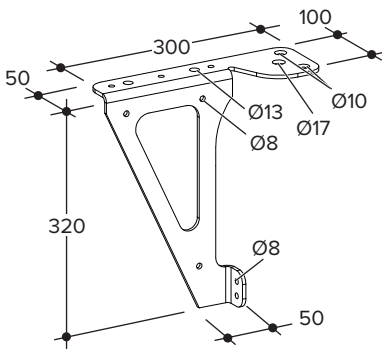
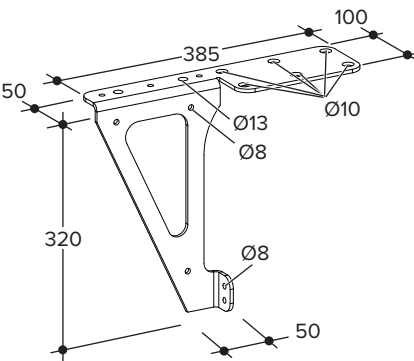
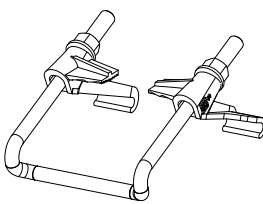
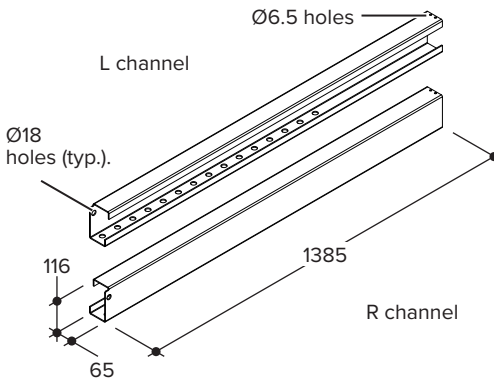
	Component	Code	Weight [kg]
	SCR Panel Rib 125	611655	3.89
	SCR Panel Rib 50	611660	1.70
	SCR Panel Rib 37.5	611665	1.94
	Used with the cladding panels to create more attachment points, for the SCR Panel Platform Bracket (code:611580) for example. The SCR Panel Rib is attached to the profiles of the panels. See page 86.		
	SCR Panel Rib 60	611683	2.23
	Used with the cladding panels to create more attachment points, for the SCR Panel Platform Bracket (code:611580) for example. The SCR Panel Rib is attached between the outer profiles and the centre profiles of the panels. See page 86.		
	SCR Panel Crane Suspension	612410	1.96
	Used to lift the SCR Cladding Panels. For more information refer to the separate operating instructions.		
	SCR Panel Transport Locking Pin	612124	0.10
	Used to secure the extension panels in the retracted position whilst the SAFESCREEN G2 unit is being transported to site. See page 145. Steel wires not fully shown for clarity.		

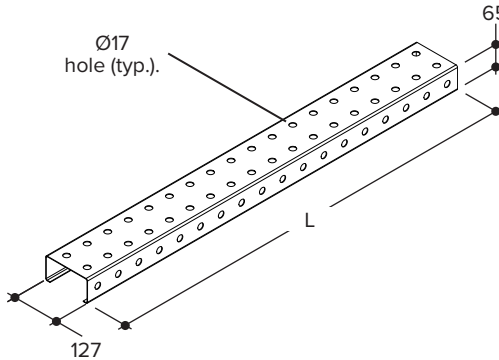
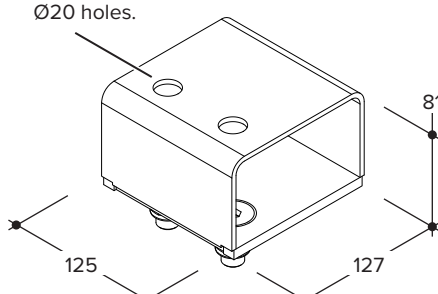
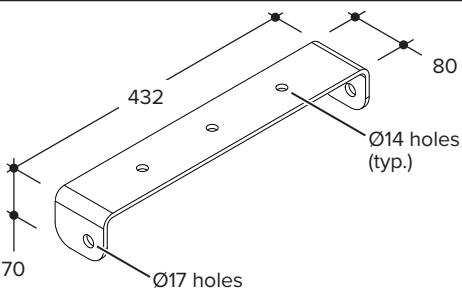
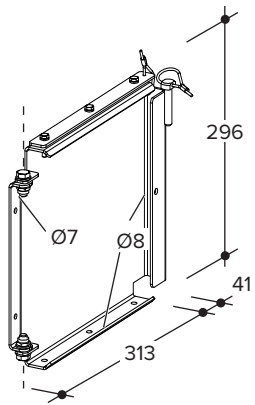
4.4.2 Timber cladding and connectors

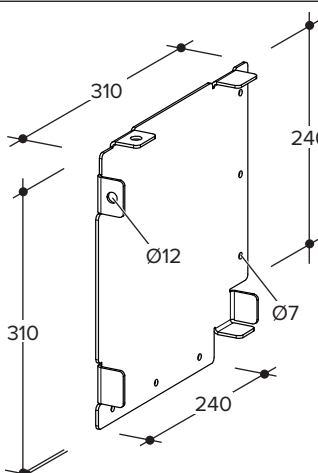
	Component	Code	Weight [kg]
	H 20 Beam 590	581851	29.50
	H 20 Beam 490	581840	22.54
	H 20 Beam 450	581830	20.70
	H 20 Beam 390	581829	17.94
	H 20 Beam 360	581818	16.56
	H 20 Beam 330	581807	16.50
	H 20 Beam 290	581792	13.34
	H 20 Beam 265	581781	12.19
	H 20 Beam 245	581770	11.27
	H 20 Beam 190	581760	8.74
	H 20 Beam per meter	581862	4.60
	Used to form the timber cladding. See page 84.		
	SCR Timber Beam Bearing	611250	4.96
	The SCR Timber Beam Bearing is used with timber cladding to support the timber beams. See page 84. SWL: V = 18.00 kN H (pull) = 8.40 kN H (shear sideways) = 2.10 kN		
	SCR IK Timber Beam Connector	611401	1.26
	Used with timber cladding, the SCR IK Timber Beam Connector is designed to connect timber beams to the rail. It cannot support vertical forces / forces along the waler. All vertical forces need to be transferred to a SCR Timber Beam Bearing. See page 86.		

4.5 Platforms

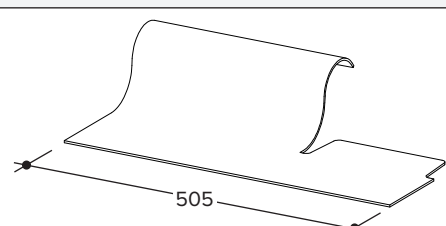
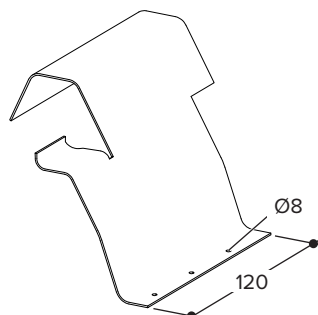
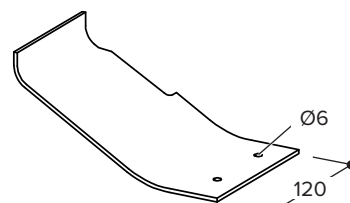
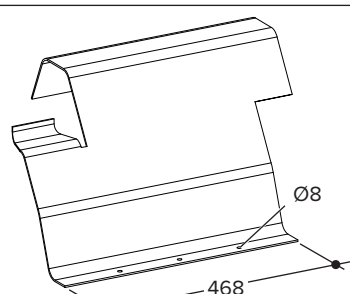
	Component	Code	Weight [kg]
	SCR Platform Bracket Adaptor 125	611640	9.88
	SCR Platform Bracket Adaptor 50	611645	5.90
	SCR Platform Bracket Adaptor 37.5	611650	5.00
	The SCR Platform Bracket Adaptors are attached to the profiles of the SCR Cladding Extendable Panels to provide attachment points for a SCR Panel Platform Bracket (code:611580). The SCR Platform Bracket Adaptors allow for the attachment points of the SCR Cladding Extension Panel to be flush to the attachment points of the SCR Cladding Panels. See page 89.		
	SCR Panel Platform Bracket	611580	2.99
	The SCR Panel Platform Bracket is attached to the profiles of the cladding panels, and it supports a timber platform. The SCR Panel Platform Bracket can be attached upside down as well. See page 87.		
	SCR Panel Platform Bracket Extension	612239	3.21
	Used with cladding panels and attached to the SCR Panel Platform Bracket (code:611580). The SCR Panel Platform Bracket Extension allows an extended access platform to be created that reaches the concrete slab once the formwork is removed. See page 88.		

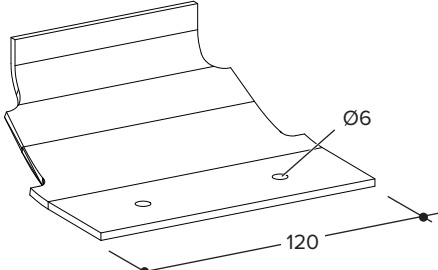
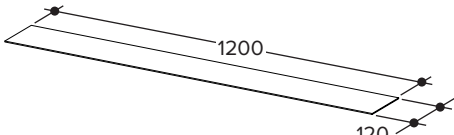
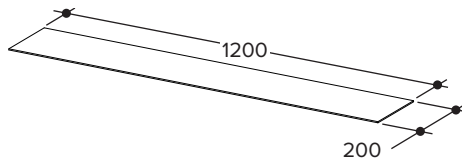
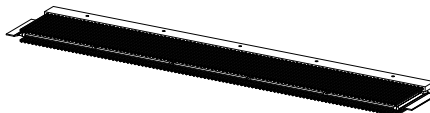
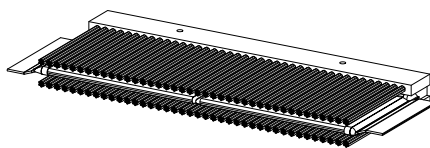
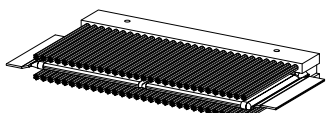
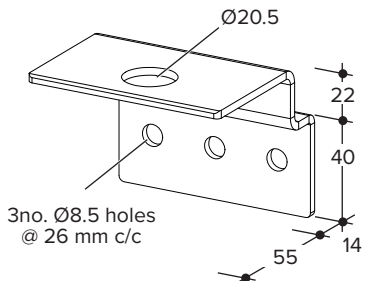
	Component	Code	Weight [kg]
	SCR Platform Bracket Timber Beam Used to create support for a platform when using timber beams as cladding. Two parallel timber beams are required for the SCR Platform Bracket Timber Beam to be attached. See page 90.	611255	1.61
	SCR Platform Bracket Timber Beam long The SCR Platform Bracket Timber Beam Long is used for the same purpose as the SCR Platform Bracket Timber Beam (code:611255). The SCR Platform Bracket Timber Beam Long however does not require a timber packer to be attached to the timber beams.	611535	1.99
	H 20 Timber Beam Clamp Used to attach the H 20 Beams to the SCR Platform Beam 0.75 m rigid (code:612263) or to the SCR Platform Beam 0.75 m (code 612260). Can also be used to connect timber beams to an IK Waler L.	568048	0.79
	Extension Channel 138 left Extension Channel 138 right Used in folding platforms, to allow for platforms to be folded and adjusted for temporary storage / transportation. Always use in pairs. See page 132.	595149 595150	9.68 9.68

	Component	Code	Weight [kg]
	HD Channel 262	595253	15.75
	HD Channel 150	595254	9.00
	HD Channel 137	595255	8.25
	HD Channel 131	595256	7.88
	HD Channel 125	595257	7.50
	HD Channel 119	595258	7.13
	HD Channel 106	595259	6.38
	HD Channel per meter	595260	6.00
	Used for the folding platform. One flange with holes allows for fixing channel to channel or to fixed platforms. The other flange, without holes, allows for plywood decks to be fixed using self-drilling screws. Non-standard length available as sale only. Items upon request. Some items may not be readily available. See page 132.		
	Guide Box	595142	2.24
	Used with the HD Channels to allow for adjustment of the Extension Channel 138 (code:595149/595150). Supplied with M16x40 CSK screws, washers and nuts. See page 132.		
	Pivot Plate	595143	2.20
	Connects to the Extension Channel 138 (code:595149/595150) to allow for the wing platform to rotate for easier temporary storage / transportation. See page 132.		
	SCR Steel Toe Trap 28x28	611675	3.44
	Used to form a debris-catching platform. The SCR Steel Toe Trap 28x28 is used in conjunction with the SCR Steel Toe Plate 0.28x0.28 (code:611626). See page 91.		

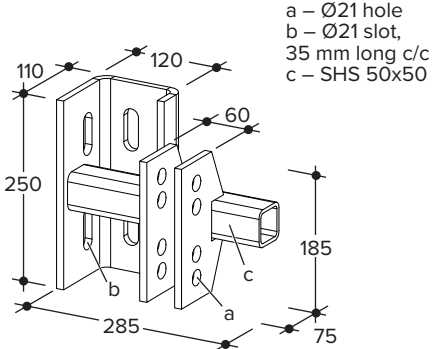
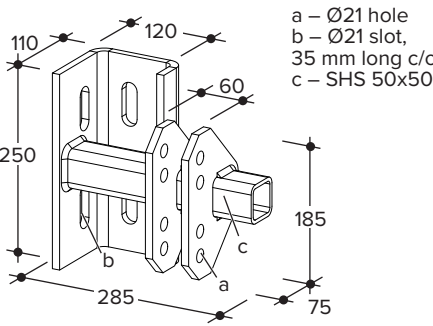
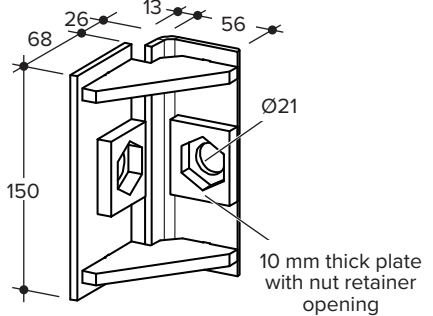
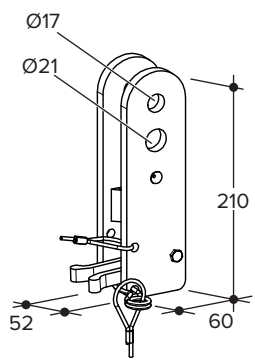
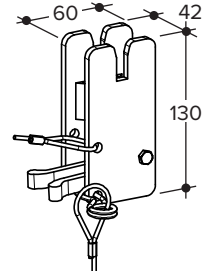
	Component	Code	Weight [kg]
	SCR Steel Toe Plate 28x28	611626	2.30
	Used to form a debris-catching platform.		
	The SCR Steel Toe Plate 28x28 is used in conjunction with the SCR Steel Toe Trap 28x28 (code:611675). See page 91.		

4.6 Rubber covers and brushes

	Component	Code	Weight [kg]
	Rubber Cover Climbing Bracket L0	611664	0.35
	See page 91.		
	Rubber Cover Climbing Bracket IK M L-1	611663	0.08
	See page 92.		
	Rubber Cover IK M L-1	611662	0.07
	See page 92.		
	Rubber Cover Climbing Bracket IK L	611848	0.09
	See page 92.		

	Component	Code	Weight [kg]
	Rubber Cover IK L See page 92.	611849	0.04
	Rubber Strip 15x120 See page 92.	611651	0.50
	Rubber Strip 20x120 See page 93.	611652	0.67
	SCR Sealing Brush 15/125 Used to seal the vertical joints of the SAFESCREEN G2 unit. See page 103.	612225	
	SCR Sealing Brush 15/50 Used to seal the vertical joints of the SAFESCREEN G2 unit. See page 103.	612226	
	SCR Sealing Brush 7.5/50	611229	
	SCR Sealing Brush 15/37.5 Used to seal the vertical joints of the SAFESCREEN G2 unit. See page 103.	612227	
	SCR Sealing Brush Attachment Used to fix the SCR Sealing Brushes to the SCR Cladding Panels.	612288	0.40

4.7 Loading platform components

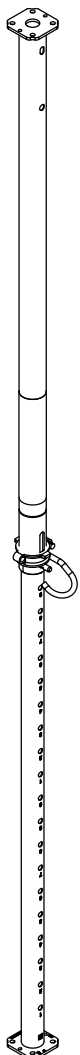
	Component	Code	Weight [kg]
	SCR Panel Connector M Used to attach the loading platform assembly to the IK Waler M of the SAFESCREEN G2 unit at right angles. See page 102.	611680	9.01
	SCR Panel Connector L Used to attach the loading platform assembly to the IK Waler L of the SAFESCREEN G2 unit at right angles. See page 102.	612660	9.55
	SCR Inner Corner Panel Connector Used to connect the cladding panels on the front of a loading platform at right angles. See page 135.	611755	1.33
	IK Connector DW15 Used to connect a DW15 tie rod to an IK Waler. The IK Connector DW15 prevents the DW15 tie rod from turning and therefore secures it against loosening.	612360	2.29
	IK Nut Securing Latch DW15 Prevents a standard DW15 hex nut from turning on the DW15 tie rod.	612295	1.15

	Component	Code	Weight [kg]
	IK Tensioning Bar DW15 Used to attach a DW15 tie rod at a flexible angle to an IK Waler.	611670	2.71
	SCR Diagonal Brace Used to brace the loading platform assembly to the rails of the SAFESCREEN G2 unit. The SCR Diagonal Brace is attached to an IK Waler M or to an IK Waler L. The outer Ø21 hole of the diagonal can be aligned to the outer row of Ø21 holes of the IK Waler M, whilst the inner Ø21 holes of the diagonal can be aligned with the central row of holes of the IK Waler L. See page 102.	611762	29.68
	SCR Cladding Panel 287.5/200 Special panel used with the loading platforms.	612435	93.65

4.8 Tools

	Component	Code	Weight [kg]
	Allen Key w.a.f. 17	612677	0.43
	Allen Key w.a.f. 19	611258	0.60
	Allen Key w.a.f. 24	611259	1.23
	Allen Key w.a.f. 27	611261	1.74
	Allen Key w.a.f. 30	611262	2.40
	Allen Key w.a.f. 36	611263	4.30

4.9 Props

	Component	Code	Weight [kg]
	EUROPLUSnew 20-250^{A)} (1470–2500 mm)	601390	13.15
	EUROPLUSnew 20-300^{A)} (1720–3000 mm)	601400	16.82
	EUROPLUSnew 20-350^{A)} (1980–3500 mm)	601410	20.52
	EUROPLUSnew 20-400^{A)} (2240–4000 mm)	601415	23.79
	EUROPLUSnew 20-550^{A)} (3030–5500 mm)	601425	36.07
	EUROPLUSnew 30-150^{B)} (1040–1500 mm)	601460	10.68
	EUROPLUSnew 30-250^{B)} (1470–2500 mm)	601430	16.19
	EUROPLUSnew 30-300^{B)} (1720–3000 mm)	601440	19.17
	EUROPLUSnew 30-350^{B)} (1980–3500 mm)	601445	24.24
	EUROPLUSnew 30-400^{B)} (2240–4000 mm)	601450	28.75

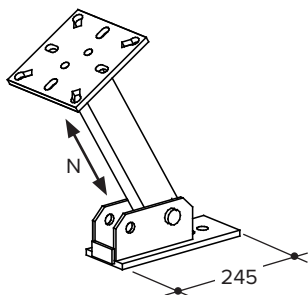
All steel props are hot-dip galvanized and have a quick-lowering mechanism and an anti-crush guard as well. Additionally, the props have a protection to prevent the sliding-out of the inner tube.

^{A)} Safe Working Load (as single prop):
20.00 kN (class D)

^{B)} Safe Working Load (as single prop):
30.00 kN (class D)



For more information regarding the EUROPLUSnew Steel Props, refer to the separate User Guide!



Strut Base

566369

7.70

Used to convert EUROPLUSnew Props into alignment struts. The base plate of the EUROPLUSnew connects to the Strut Base with 4no. M12x30 Bolts and Nuts.

Safe Working Load (N): 15.00 kN.

	Component	Code	Weight [kg]
	Strut Adaptor Used to convert EUROPLUS ^{new} Props into alignment struts. The upper plate of the EUROPLUS ^{new} connects to the Strut Adaptor with 4no. M12x30 Bolts and Nuts. Previous versions (pre-2024) do not have the Ø21 thro' hole and drilling may be required. Safe Working Load (N): 15.00 kN.	565331	4.88

4.10 Storage

	Component	Code	Weight [kg]
	Euro Trolley Used to manually manoeuvre approved Hünnebeck transport equipment. The Euro Trolley has 2no. lockable swivel castors. Safe Working Load: 1,300 kg	607610	39.57



For more information regarding the Euro Trolley, refer to the separate Original Operating Instructions!

	Euro Lattice Box Lattice box used to store and transport small items by crane. Can be moved using the Euro Trolley. Safe Working Load: 1,200 kg.	548480	68.79
	Euro Stacking Frame 120/80 Stacking frame used to store and transport materials by crane. Can be moved using the Euro Trolley. Safe Working Load: 1,200 kg.	553689	54.47
	Euro Stacking Frame 160/120 Stacking frame used to store and transport materials by crane. Safe Working Load: 1,200 kg.	566494	80.00

5 Applications

The following illustrations show typical applications of the components of the SAFESCREEN G2 system. Other applications may be possible. Consult your Hünnebeck design office. **Please note that unless otherwise stated, all bolts are grade 10.9 and the nuts grade 10.**

5.1 Anchors and climbing brackets

The customer must note the following:

Due to the quick turn-around cycles of the SAFESCREEN G2 system, the concrete used to anchor the SAFESCREEN G2 unit may not yet be set (cured) before the SAFESCREEN G2 unit is lifted to another anchor point, thus not leaving the 28 days required for the concrete to reach most of its designed strength. Therefore the designed concrete and rebar are most likely not capable of withstanding the extra imposed loads caused by the SAFESCREEN G2 units.

The customer is responsible for ensuring that the existing structure is capable of withstanding the extra imposed loads, including but not limited to re-designing the rebar where the anchor points will be located.

Some typical rebar layouts used at the anchor points of the SAFESCREEN G2 units are shown below. The rebar schemes are to illustrate typical layouts only.

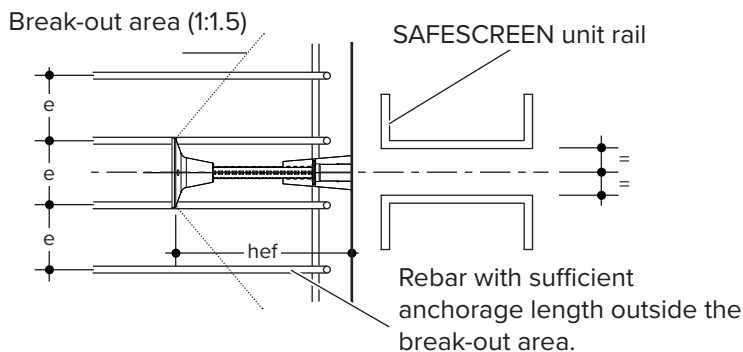


For more information regarding the specific site requirements, refer to the supplied design scheme.

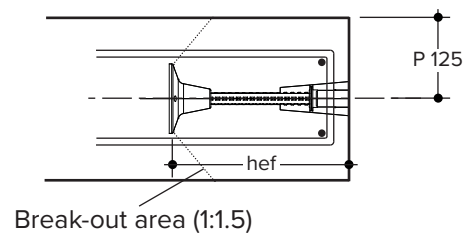
Contact the Hünnebeck design office for more information.

5.1.1 SCR Slab Edge Bracket application

Cone and rebar layout – plan view

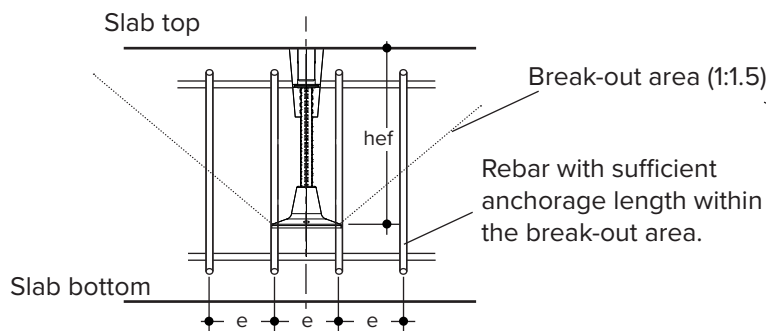


Cone and rebar layout – section

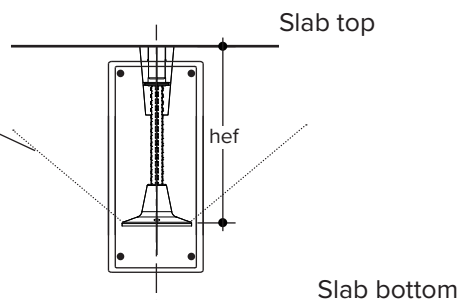


5.1.2 SCR Slab Top Bracket application

Cone and rebar layout – section



Cone and rebar layout – section





WARNING

Risk of serious injury or death!

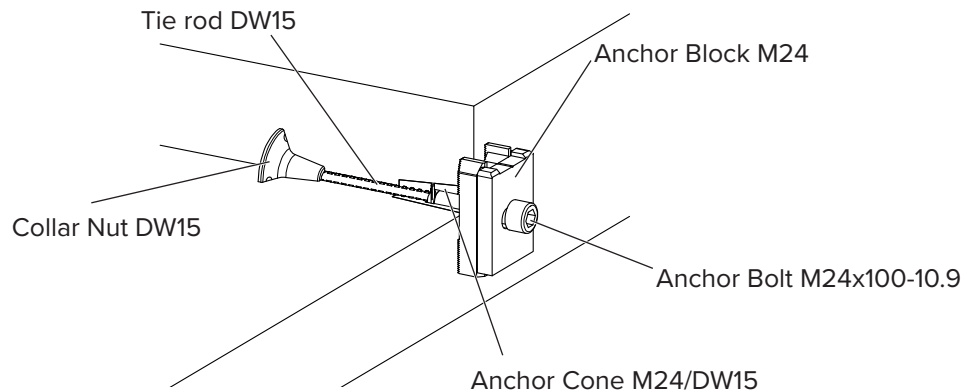
Avoid any openings, embedded items, or concrete surface offsets in the break-out area that may reduce the capacities of the concrete. This includes e.g. boxes for reverse bending reinforcement. If such features or items cannot be avoided in the break-out area of the cones, they will very likely reduce the load bearing capacity of the anchor point.

For support, consult your local Hünnebeck office. IF IN DOUBT, ASK!

5.1.3 Anchor Cone M24/DW15

Note that in this chapter, the anchor shown is made for DW15 components. However, depending on the job requirements DW20 components may be used.

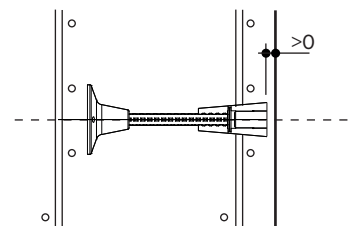
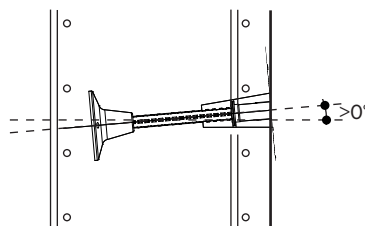
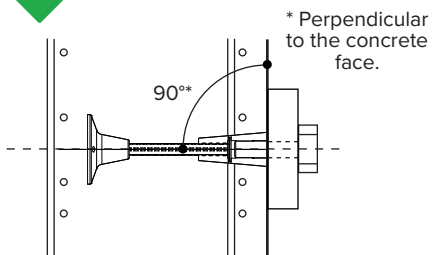
The pre-cast Anchor Cone M24/DW15 (code:496664) in conjunction with an Anchor Block M24 (code:611220), the Anchor Bolt M24x100-10.9 (code:611218), the tie rod and the Collar Nut DW15 (code:602091) will provide horizontal restraint for the SAFESCREEN G2 unit.



During shuttering the customer is to ensure that:

- The Anchor Cone M24/DW15 (code:496664) is flush with the form sheet.
- The Anchor Cone M24/DW15 with the anchoring is mounted perpendicular to the form sheet.
- The Anchor Cone M24/DW15 anchoring is fixed to the concrete reinforcement.
- The anchor is 125 mm from the top of the slab and that it is aligned with the climbing rail.

Concrete slab – plan views



The anchor must be installed in such a way that it cannot tilt during pouring.



WARNING

Risk of serious injury or death!

Do not weld or heat tie rods. This can cause the tie rod to fail and lead to the SAFESCREEN G2 unit to lose horizontal restraint provided by the anchors.



WARNING

Risk of serious injury or death!

Anchors not mounted properly will cause the bolt to overload and break due to shear forces and bending.

This can lead to the SAFESCREEN G2 unit losing horizontal restraint provided by the anchors.



WARNING

Risk of serious injury or death!

The design of the anchors will only state the local transmission of loads (forces) into the concrete.

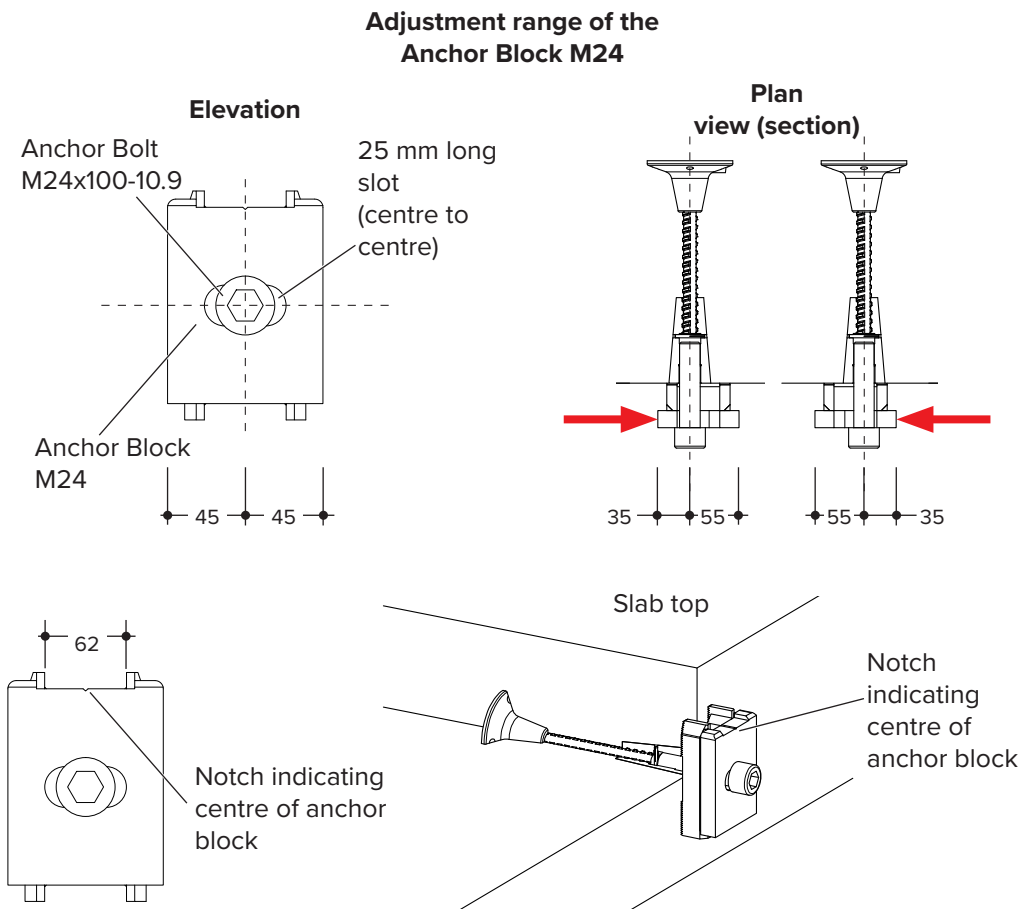
The transfer of loads (reaction forces) within the concrete structure must be checked separately for each application.

The customer has to ensure that the concrete can take the extra imposed loads.

The required concrete grade for cone anchoring is dependent on the magnitude of loads. Please refer to DIBt approval Z-21.6-1854 or contact Hünnebeck for technical advice.

5.1.4 Anchor Block M24

The Anchor Block M24 (code:611220) can be adjusted ± 10 mm horizontally to compensate for any horizontal misplacement of the cone. The vertical tolerance for the placement of the anchor cone is ± 20 mm.



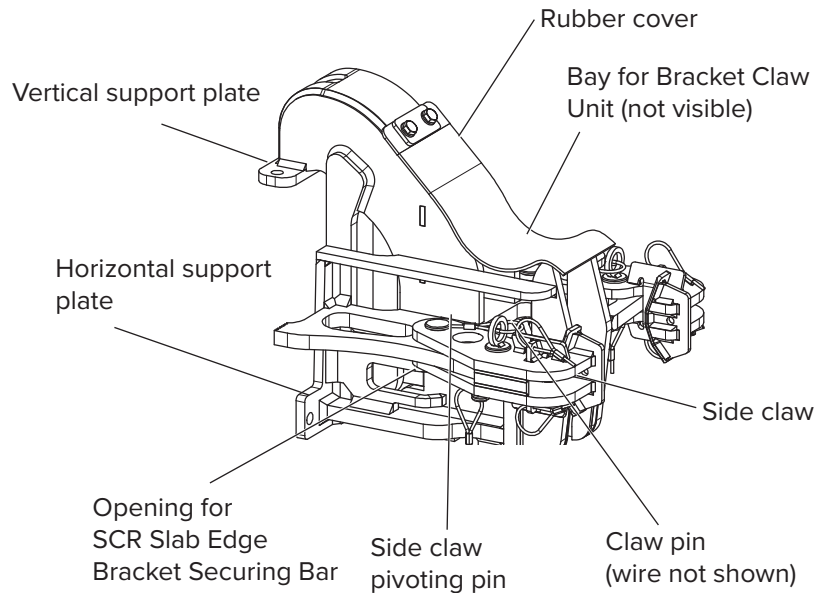
The 62 mm spacing between the protruding parts at the top of the Anchor Block M24 can be used to align the component with the rails.



The required distance from the anchor centre to the top of the slab is 125 mm. If a steel spacer plate is used, then the required distance can be reduced by the same distance as the thickness of the spacer filler plate. In this case, the minimum vertical distance between the top of the concrete slab and the anchor centre line is 100 mm.

5.1.5 SCR Slab Edge Bracket

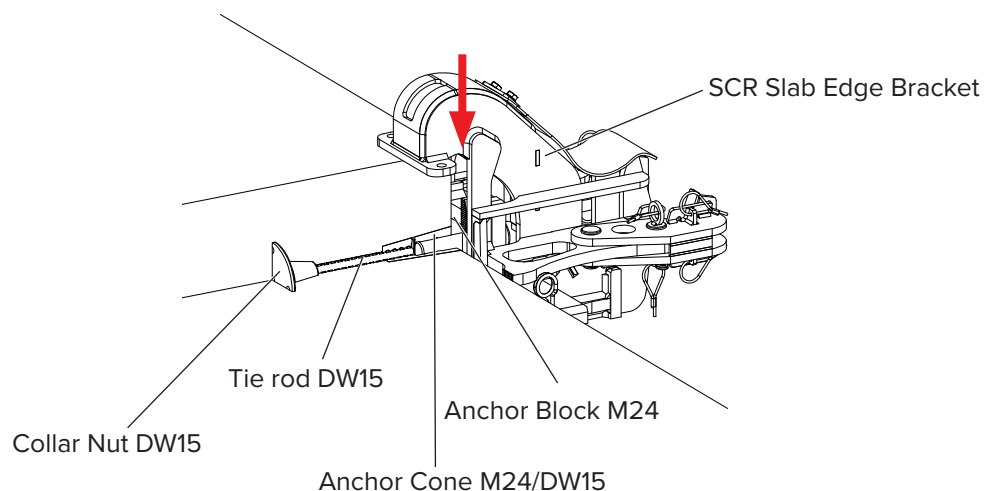
Used on slab edges, the SCR Slab Edge Bracket (code:611170) is attached to the Anchor Block M24 (code:611220).



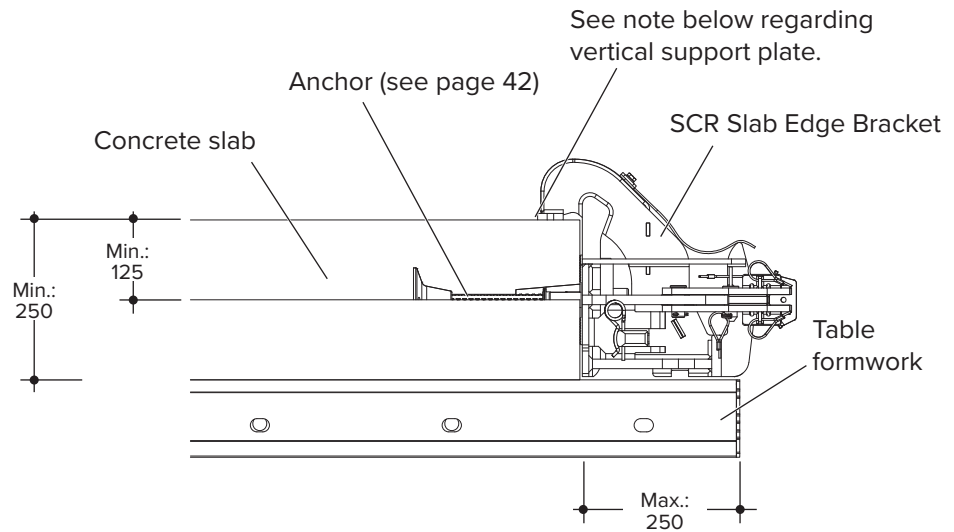
To attach the SCR Slab Edge Bracket, position the horizontal support plate of the bracket against the slab edge just above the Anchor Block M24. Slide the bracket downwards until the bracket engages the block.



The Anchor Block M24 (code:611220) must be fully inserted into the SCR Slab Edge Bracket (code:611170) and the vertical support plate of the bracket must rest on top of the concrete slab. The SCR Slab Edge Bracket must be secured with the SCR Slab Edge Bracket Securing Bar (code:611230), see page 47.



The SCR Slab Edge Bracket can be used on slabs with the slab formwork still in place. The minimum required concrete slab thickness is 250 mm.



WARNING

Risk of serious injury or death!

All vertical loads must be taken by the vertical support plate of the SCR Slab Edge Bracket (code:611170).

Ensure that there is enough separation between the Anchor Block M24 (code:611220) and the inside curve of the SCR Slab Edge Bracket.

The Anchor Block M24 must not be subjected to shear forces. This can cause the Anchor Block M24 to break due to shear forces, leading to the SAFESCREEN G2 unit to lose horizontal restraint provided by the anchors.

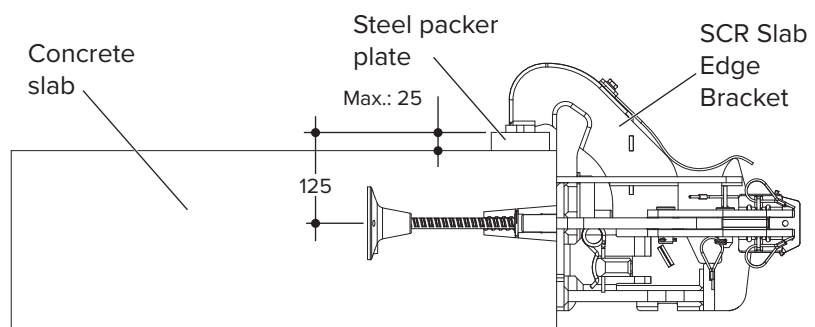
The SCR Slab Edge Bracket must be secured by the SCR Slab Edge Bracket Securing Bar (code:611230) before taking any loads.

For more information regarding anchors and the tolerances for the positioning of the anchors, see page 42.

If the concrete slab thickness is between 225 and 250 mm, a steel packer plate can be used between the vertical support plate of the bracket and the concrete slab. The steel spacer plate must not be more than 25 mm thick and the distance of the centre line of the anchor to the slab top must not be less than 100 mm.



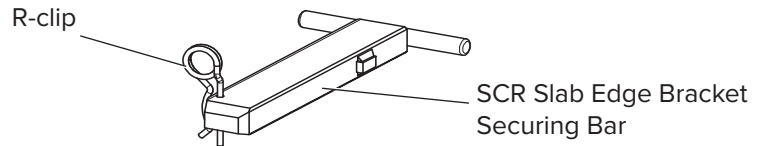
The distance between the top of the steel packer plate and the centre line of the anchor cone must be 125 mm.



When used as the supporting climbing bracket for the SAFESCREEN G2 unit, a Bracket Claw Unit (code:611115) is inserted into the SCR Slab Edge Bracket, see page 51.

5.1.6 SCR Slab Edge Bracket Securing Bar

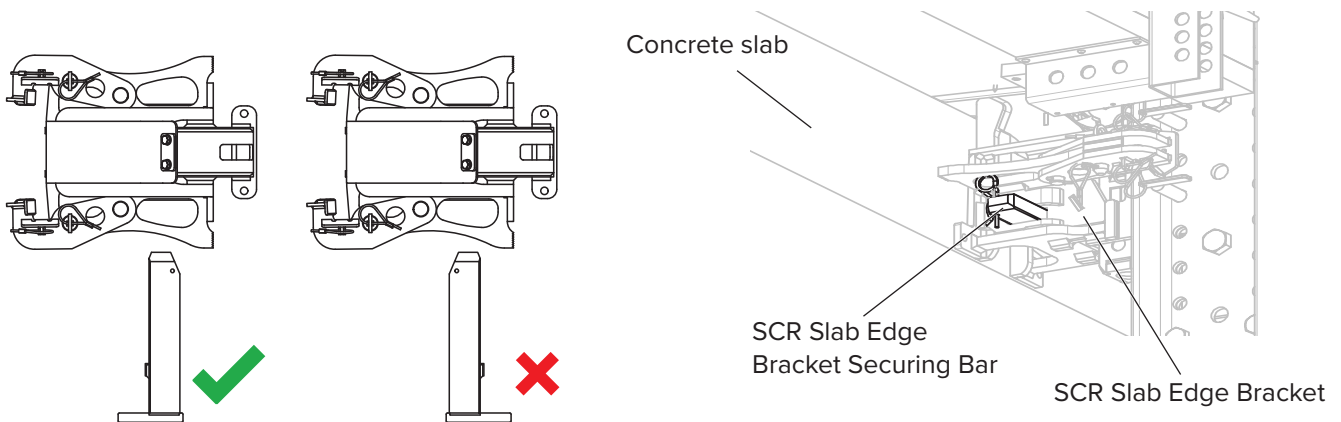
The SCR Slab Edge Bracket Securing Bar (code:611230) prevents the SCR Slab Edge Bracket (code:611170) from sliding vertically and disengaging from the Anchor Block M24 (code:611220).



WARNING

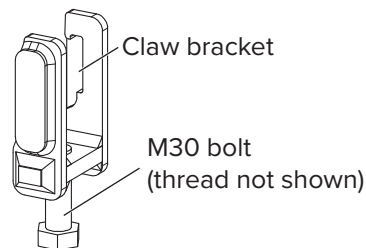
Risk of serious injury or death!

If the SCR Slab Edge Bracket Securing Bar (code:611230) cannot be inserted, the position of the cone has to be checked. Never use the SCR Slab Edge Bracket (code:611170) without a SCR Slab Edge Bracket Securing Bar.

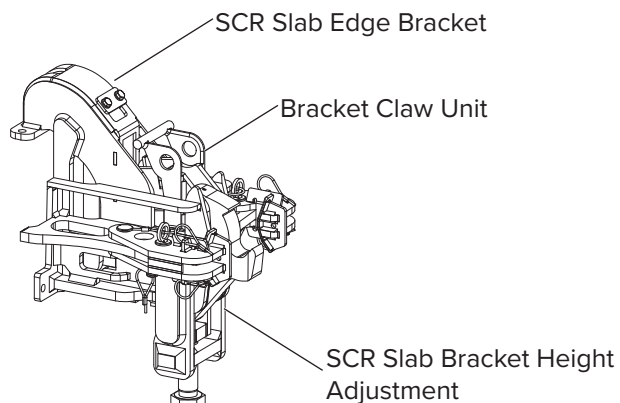


5.1.7 SCR Slab Bracket Height Adjustment

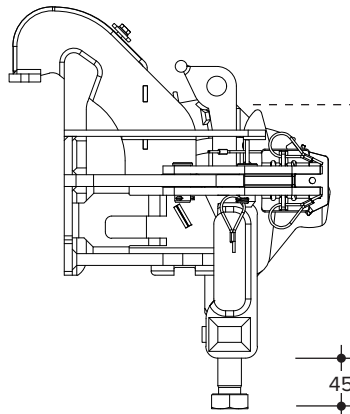
The SCR Slab Bracket Height Adjustment (code:611205) is used with the SCR Slab Edge Bracket (code:611170) to vertically adjust the position of the Bracket Claw Unit (code:611115) up to 40 mm.



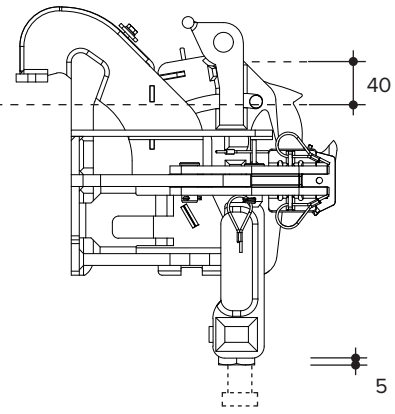
The SCR Slab Bracket Height Adjustment is attached at the bottom of the SCR Slab Edge Bracket and can be adjusted using a w.a.f. 46 spanner.



Bracket Claw Unit in the lowered position



Bracket Claw Unit in the raised position



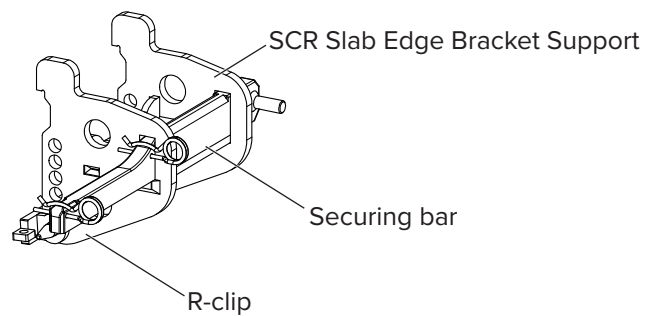
The supporting Bracket Claw Units (code:611115) should be levelled before starting the climbing operations. It is possible to adjust the height of the support of the SAFESCREEN G2 unit whilst it is being supported by the Bracket Claw Unit but it is recommended that the supporting Bracket Claw Units should be levelled before starting the climbing operations as long as the claw module is not yet loaded.

For more information regarding the Bracket Claw Unit (code:611115) see page 51.

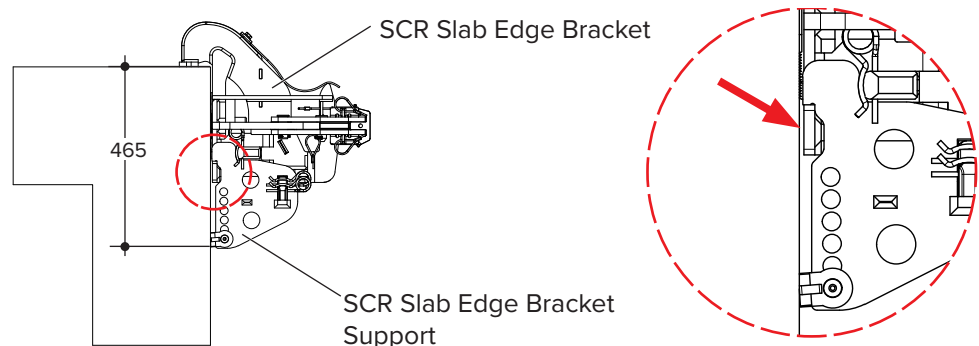
5.1.8 SCR Slab Edge Bracket Support

The SCR Slab Edge Bracket Support (code:611725) is used to increase the vertical load capacity of the SCR Slab Edge Bracket (code:611170).

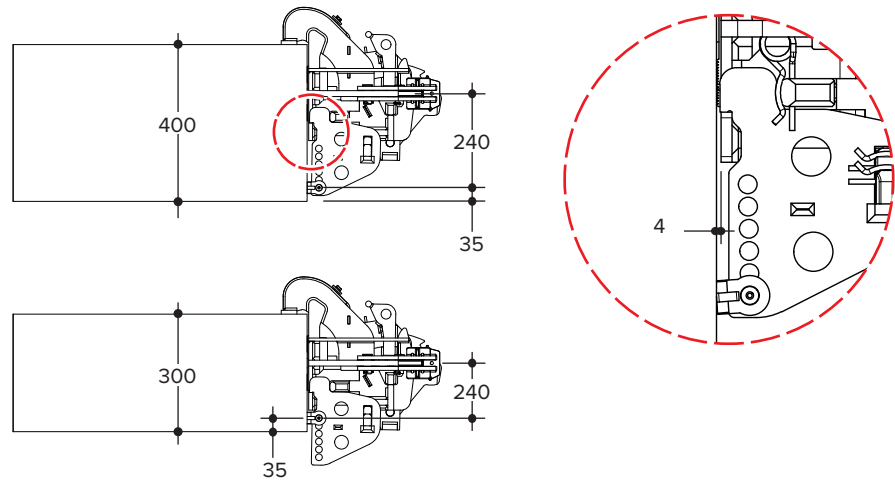
Minimum slab thickness >280 mm.



Please note that when using the SCR Slab Edge Bracket Support, the SCR Slab Edge Bracket must not be in contact with the concrete slab as shown in the detail below.



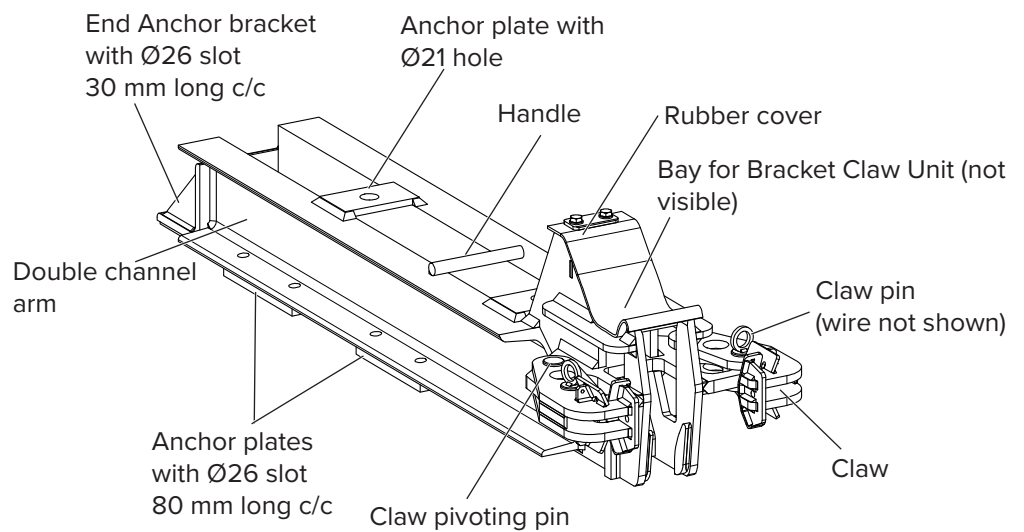
The back support plate of the SCR Slab Edge Bracket Support can be positioned in one of the available 6 no. hole positions to accommodate several slab thicknesses.



For more information regarding the Bracket Claw Unit (code:611115), see page 51.

5.1.9 SCR Slab Top Bracket

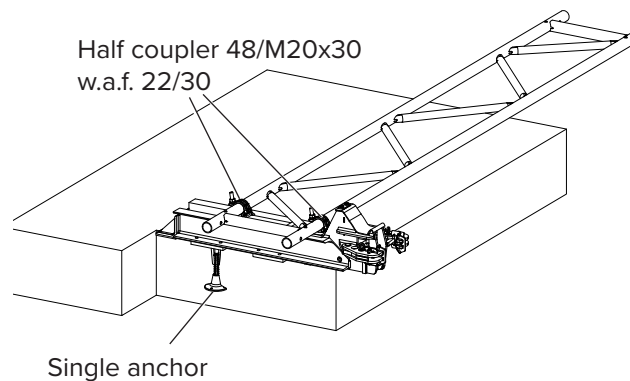
Used on slab tops, the SCR Slab Top Bracket (code:611510) is anchored to the concrete slab.



Note that in the SCR Slab Top Bracket has a second anchor plate on the top with a Ø21 hole which is not visible in the image above, just behind the bracket at the front.

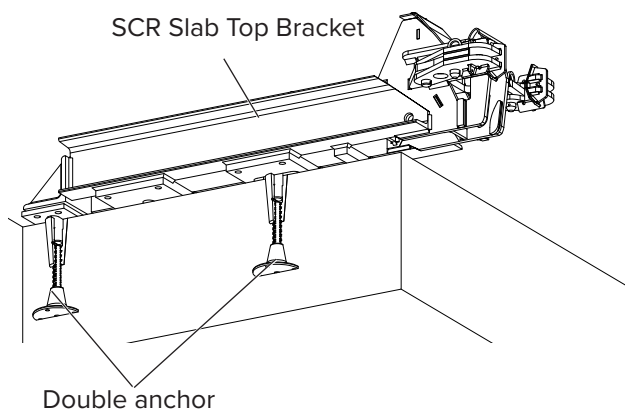
The SCR Slab Top Bracket can be fixed to the concrete slab using one of three options shown below.

Option 1: Single anchor

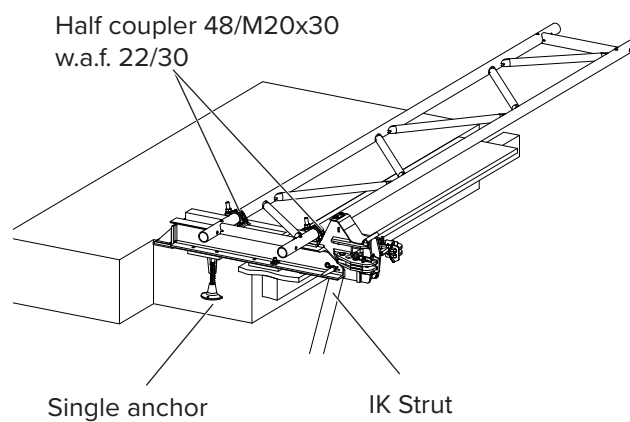


Note that in both option 1 and 3 the steel lattice girder has to be connected to the adjacent SCR Slab Top Bracket, not shown.

Option 2: Double anchor



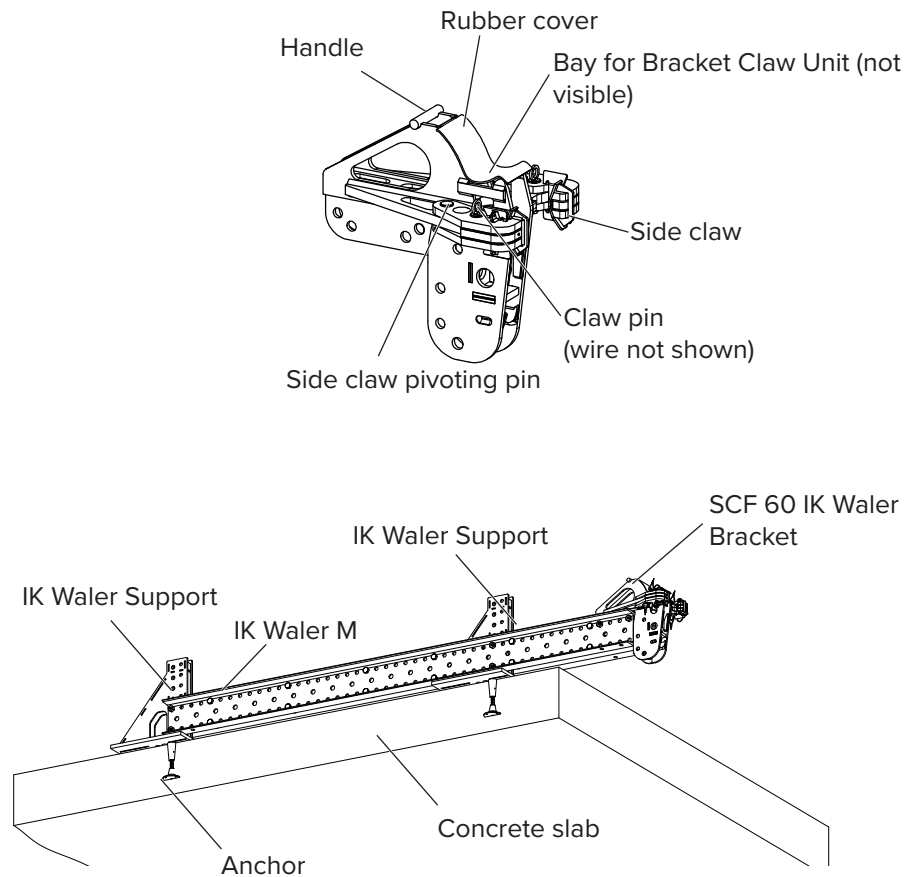
Option 3: Cantilevered bracket with IK Strut



To support the SAFESCREEN G2 unit, a Bracket Claw Unit (code:611115) is inserted into the SCR Slab Top Bracket, see page 51.

5.1.10 SCF 60 IK Waler Bracket

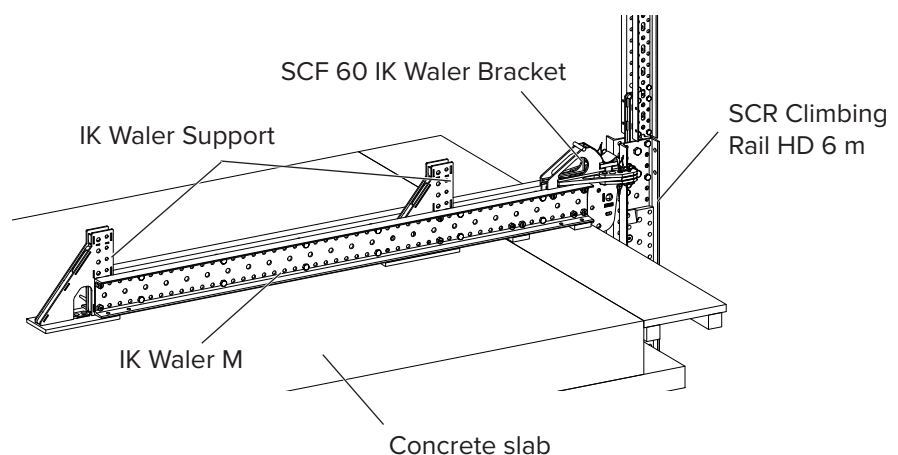
Used on slab tops, the SCF 60 IK Waler Bracket (code:611710) is used in a similar way as the SCR Slab Top Bracket (code:611510) but will provide more flexibility for anchoring. The bracket is be fixed in an IK Waler L or IK Waler M, which must be ordered separately.



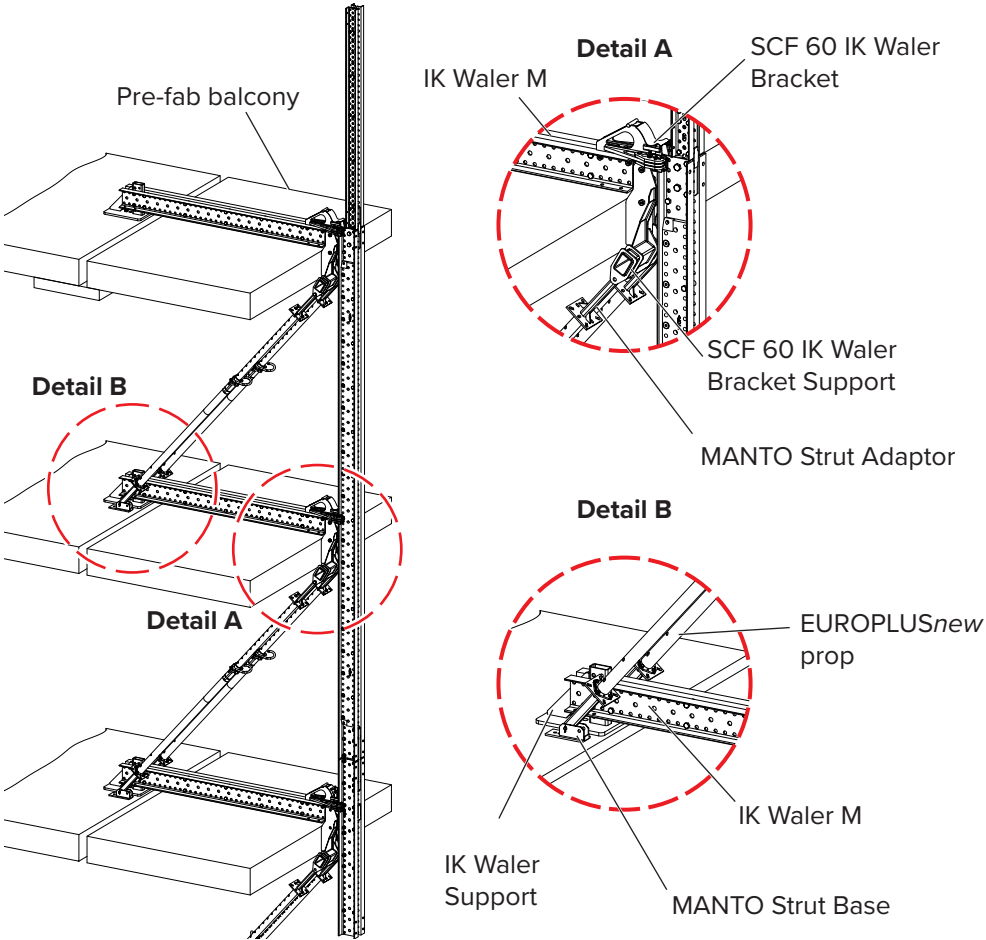
For more information regarding IK Walers, refer to the INFRA-KIT User Guide.

Some of the typical applications can be seen below. Note that these are only examples. For a detailed design, refer to the Hünnebeck design office.

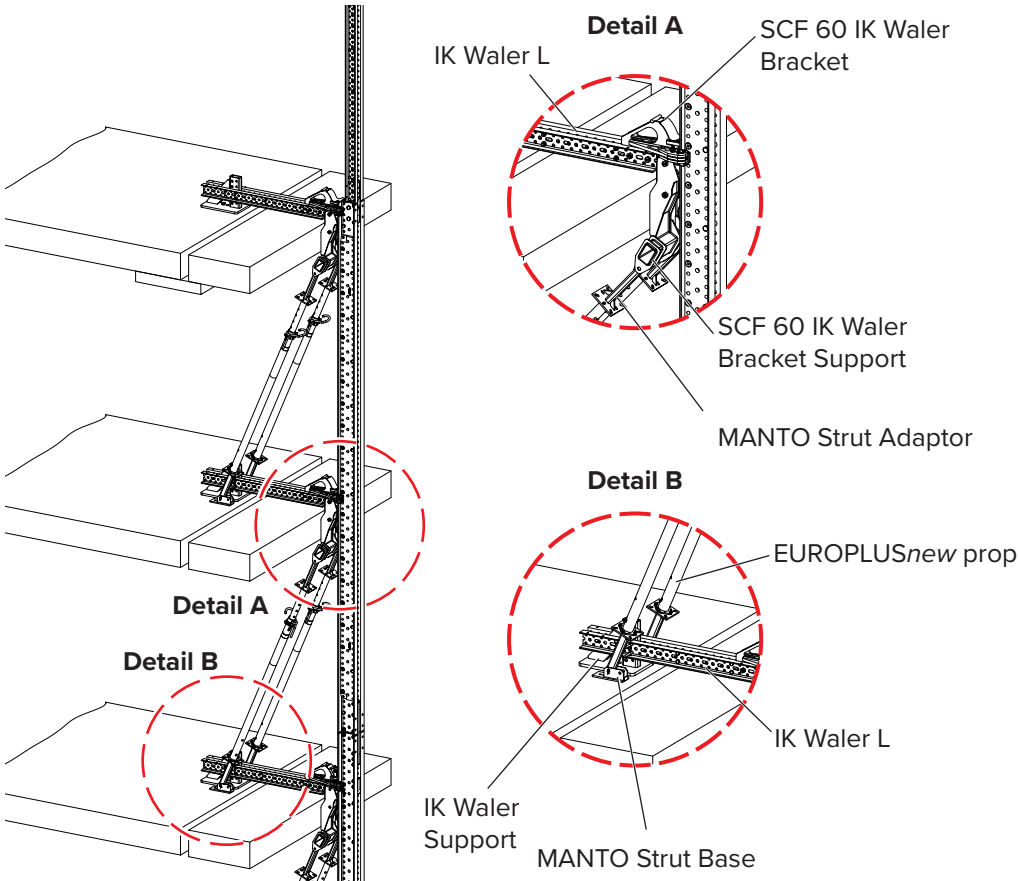
Cantilevering single IK Waler M



Propped IK Waler M (pre-fab balcony)



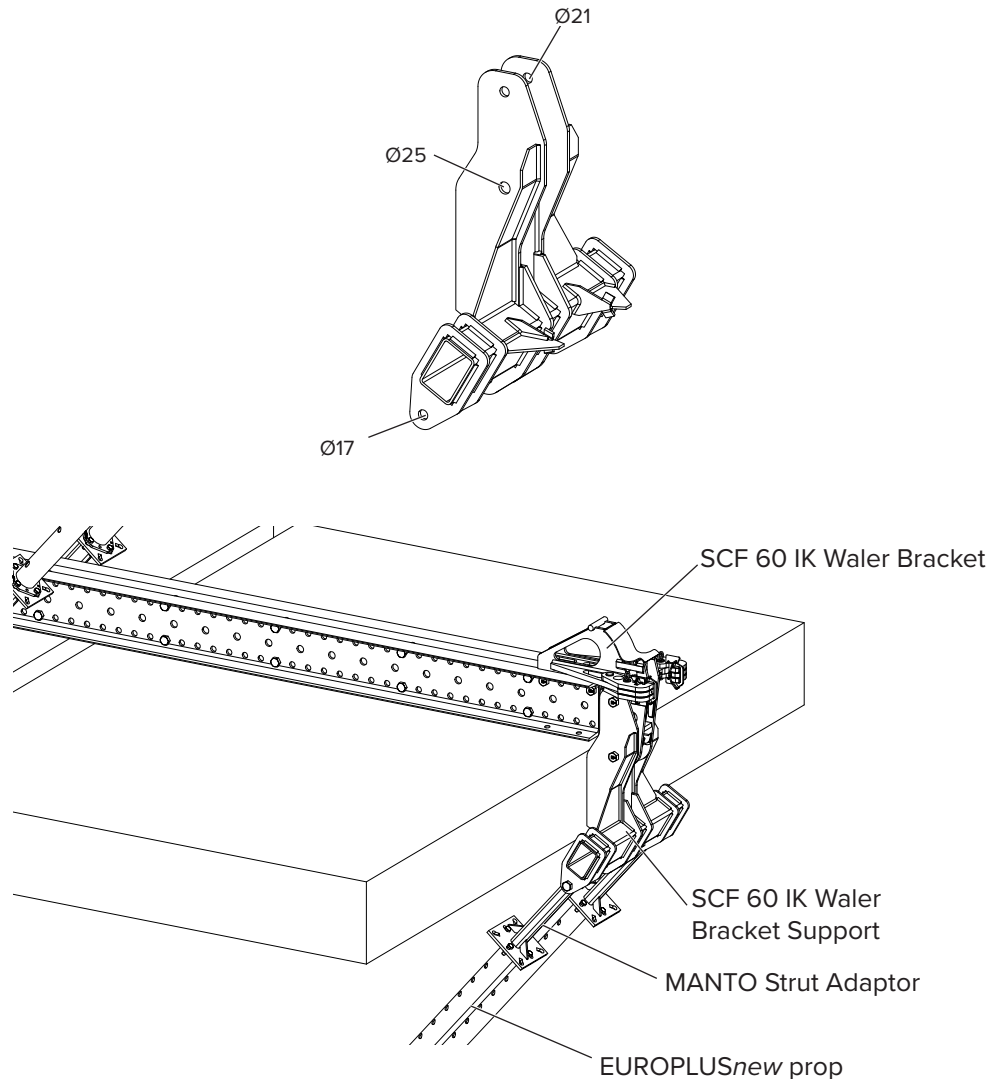
Propped IK Waler L with platform



When used as the supporting climbing bracket for the SAFESCREEN G2 unit, a Bracket Claw Unit (code:611115) is inserted into the SCF 60 IK Waler Bracket, see page 51.

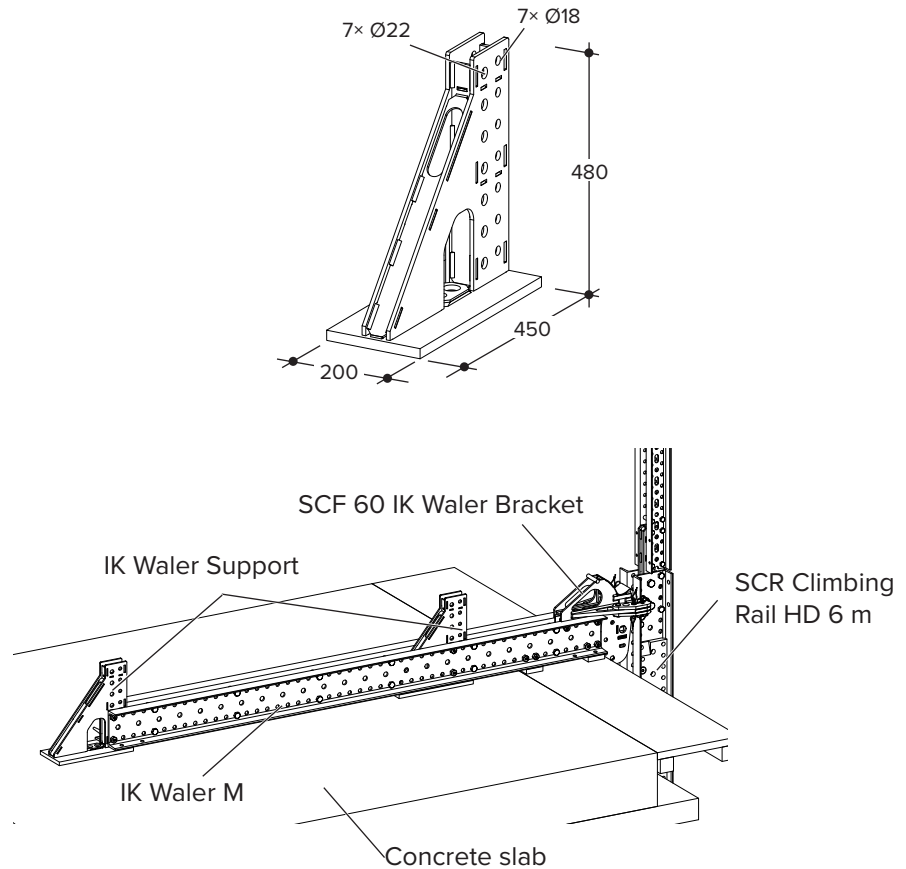
5.1.11 SCF 60 IK Waler Bracket Support

The SCF 60 IK Waler Bracket Support (code:611730) is used to increase the vertical load capacity of the SCF 60 IK Waler Bracket (code:611710). Struts can be attached to the SCF 60 IK Waler Bracket Support and anchored to the concrete slab below.



5.1.12 IK Waler Support

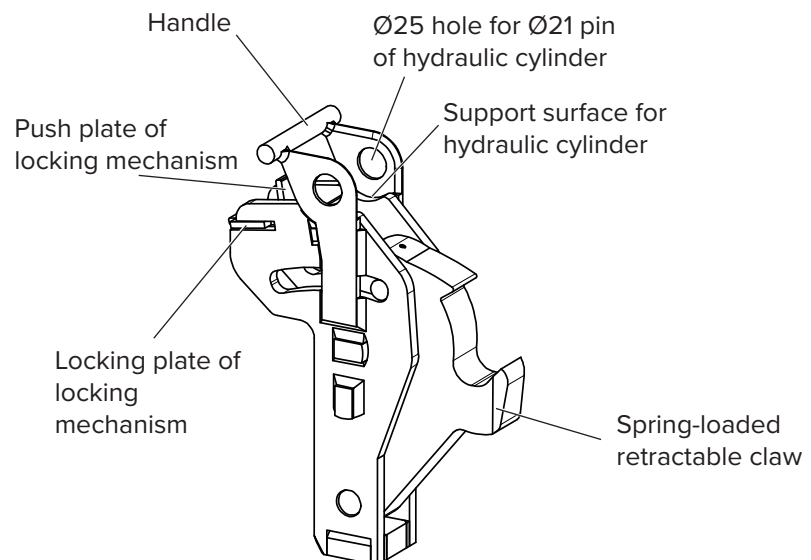
The IK Waler Support (code:611740) is used to anchor an IK Waler to a concrete slab. The base of the IK Waler Support has two hole positions (Ø26 and a Ø32 mm) for anchors.



5.1.13 Bracket Claw Unit

The Bracket Claw Unit (code:611115) allows the climbing brackets to support the SAFESCREEN G2 unit.

The top of the Bracket Claw Unit has a curved surface to accommodate the hydraulic cylinder which is secured against uplift using a Ø21 pin (part of the hydraulic cylinder).

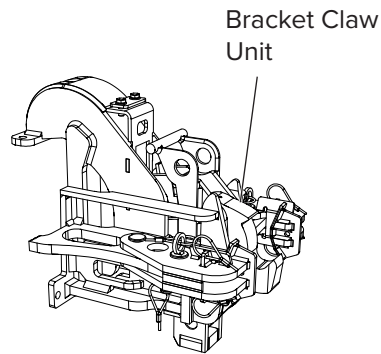


The Bracket Claw Unit is inserted into the climbing brackets and is locked in place with the spring-loaded locking mechanism.

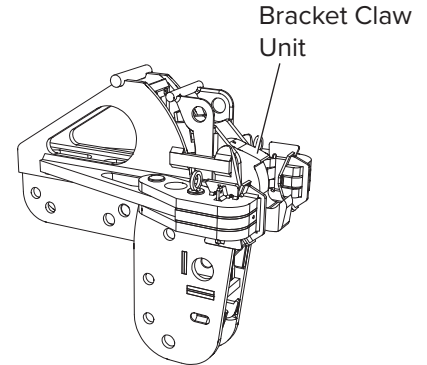


Ensure that the spring-loaded locking mechanism is fully engaged and that the Bracket Claw Unit (code:611115) is locked in place.

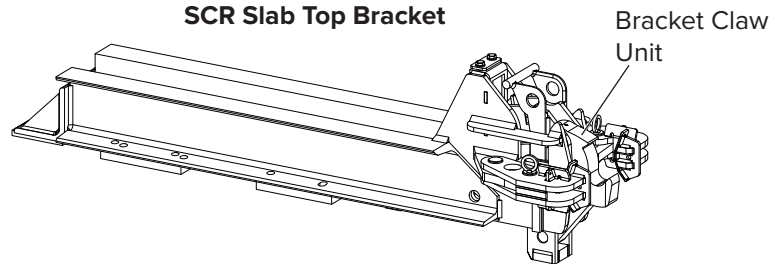
SCR Slab Edge Bracket



SCF 60 IK Waler Bracket

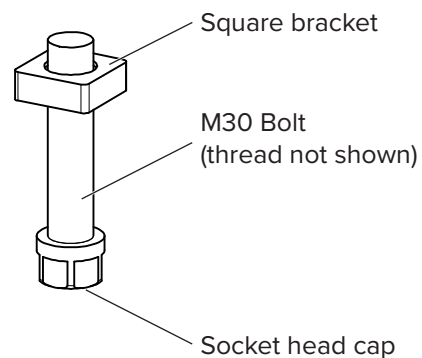


SCR Slab Top Bracket



5.1.14 SCF 60 Wall Bracket Height Adjustment

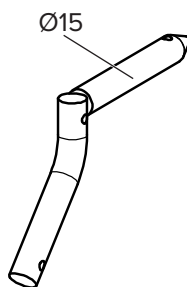
The SCF 60 Wall Bracket Height Adjustment (code:611210) is used with the SCF 60 IK Waler Bracket (code:611710) to vertically adjust the position of the Bracket Claw Unit (code:611115) up to 40 mm.



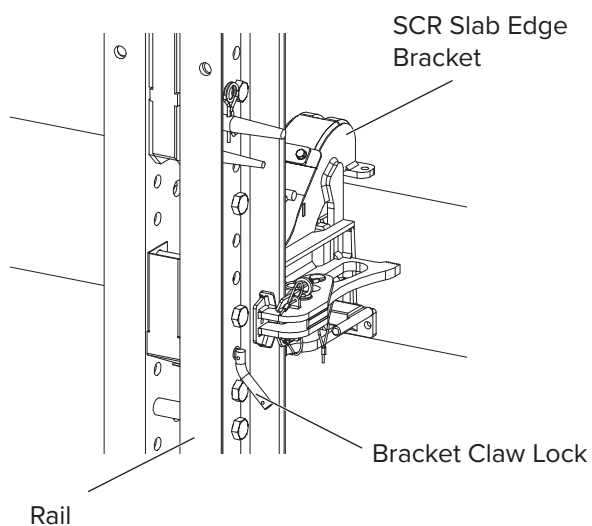
The SCF 60 Wall Bracket Height Adjustment (code:611210) is attached at the bottom of the SCF 60 IK Waler Bracket, see page 51.

5.1.15 Bracket Claw Lock

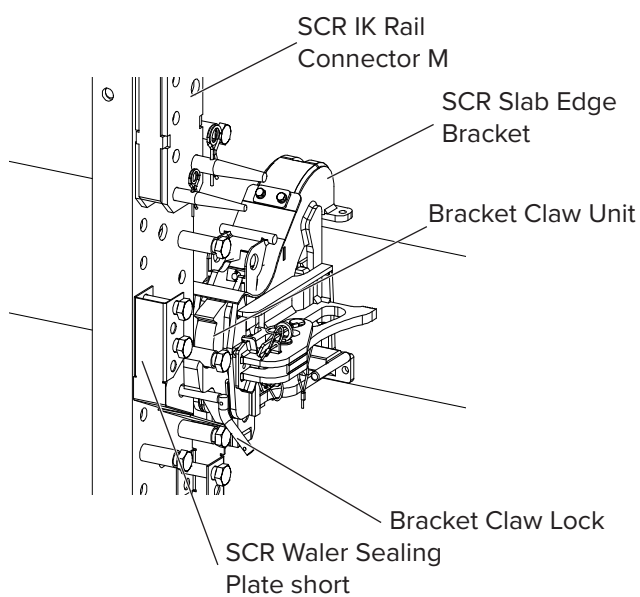
The Bracket Claw Lock (code:611380) is used to secure the SAFESCREEN G2 unit against uplift. The Bracket Claw Lock is inserted into the rail and secured using a Spring Cotter Pin Ø4 (code:173776).



Perspective



Perspective without IK Waler profile



5.2 Connections (fasteners)

The fasteners shown in this user guide, which are used to connect the different components to each other, are typical connections. Depending on the specific job requirements, these fasteners and/or their quantity may vary. Any connections not specified in the table below or in this user guide can be found in the design schemes supplied.

Always refer to the supplied design scheme specific to each job requirement, for the appropriate connection type to be used.

Shown below is a schedule of the type of connections that are most commonly used with the SAFESCREEN G2 system. Reference to these connection types is made throughout this document. This table can also be used as a reference for the supplied design schemes.



In many locations it is essential that bolts and nuts grade 10.9 / 10 are used. Therefore, to prevent mixing up of nuts, Hünnebeck requires the use of nuts grade 10 for all connections sized M16 or M20 – even when the bolt is only of grade 8.8.

Connection types				
Type	Qty	Code	Description	Grade
CT_S_00			Removal of standard IK-bolt connection	
CT_S_01			IK Pin Ø16	
	1	608816	IK Pin Ø16	
	1	173776	Spring Cotter Pin Ø4	
CT_S_02			IK Pin Ø20	
	1	608820	IK Pin Ø20	
	1	173776	Spring Cotter Pin Ø4	
CT_S_03			IK Pin Ø25	
	1	608825	IK Pin Ø25	
	1	174553	Spring Cotter Pin Ø5	
CT_S_04			DU-AL T-bolt	
	1	717605	DU-AL T150 MKII Anchor Washer Clamp	
CT_S_05			SCF 60 Dual Axis Brace Pin	
	1	611410	SCF 60 Dual Axis Brace Pin	
	1	173776	Spring Cotter Pin Ø4	
CT_S_06			Waler Bolt Ø20	
	1	420000	Waler Pin Ø20	
	1	173776	Spring Cotter Pin Ø4	
CT_M6_01			M6 – securing extension channels	
	1		Hex Head Bolt ISO 4017-M6x16-8.8, galv.	8.8/8
	1		Hexagonal nut ISO 7040 M6 gr. 8, galv.	
CT_M6_02			M6 – fixing of rubber cover at steel toe trap	
	1		Hex Head Bolt ISO 4017-M6x30-8.8, galv.	8.8/8
	1		Washer ISO 7094 / DIN 440-R 6.4 mm, galv.	
	1		Hexagonal nut ISO 7040 M6 gr. 8, galv.	
CT_M12_01			Mushroom head bolt M12x60 and nut	
	1		Mushroom head bolt DIN 603 / ISO 8677 – M12x60 cl. 4.6, galv.	4.6/8
	1		Hexagonal nut ISO 4032 – M12 cl. 8, galv.	
CT_M12_02			Mushroom head bolt M12x90 and nut and washer	

Connection types				
Type	Qty	Code	Description	Grade
	1		Mushroom head bolt DIN 603 / ISO 8677 – M12x90 cl. 4.6, galv.	4.6/8
	1		Washer 13 DIN 440 Form V, galv.	
	1		Hexagonal nut ISO 4032 – M12 cl. 8, galv.	
CT_M12_03			Mushroom head bolt M12x90 and nut and washer	
	1		Mushroom head bolt DIN 603 / ISO 8677 – M12x90 cl. 4.6, galv.	4.6/8
	1		Hexagonal nut ISO 4032 – M12 cl. 8, galv.	
	1		Counter plate plywood Ø21, 100x100 mm	
	2		Countersunk timber screw 5x60 mm self-drilling, galv.	
CT_M12_04			Mushroom head bolt M12x120 and nut	
	1		Mushroom head bolt DIN 603 / ISO 8677 – M12x120 cl. 4.6, galv.	4.6/8
	1		Hexagonal nut ISO 4032 – M12 cl. 8, galv.	
CT_M16_01			M16 – connector for pivot plate	
	1		Hex Head Bolt ISO 4017-M16x45-8.8, galv.	8.8
	1	608703	Self-locking Nut ISO 7040-M16-10 galvanized	10*
CT_M16_02			M16 – connector for C127-channels	
	1		Hex Head Bolt ISO 4017-M16x45-8.8, galv.	8.8
	1	608703	Self-locking Nut ISO 7040-M16-10 galvanized	10*
	2		Square washer DIN 436 17.5, galv.	
CT_M16_03			Mushroom head bolt M16x90 and nut	
	1		Mushroom head bolt DIN 603 / ISO 8677 – M16x90, galv.	
	1	608703	Self-locking Nut ISO 7040-M16-10 galvanized	10*
CT_M16_04			Standard IK-L-connection without Spacer Sleeve IK Waler L	
	1	608702	Hex. Bolt ISO 4014-M16x100-10.9 galvanized	10.9/10
	1	608703	Self-locking Nut ISO 7040-M16-10 galvanized	
CT_M16_05			Standard IK-L-connection with Spacer Sleeve IK Waler L	
	1	608702	Hex. Bolt ISO 4014-M16x100-10.9 galvanized	10.9/10
	1	608703	Self-locking Nut ISO 7040-M16-10 galvanized	
	1	608496	Spacer Sleeve IK Waler L	
CT_M16_06			SCR Timber Beam Bearing – 1× H 20 Beam – set	
	2		Hex Head Bolt ISO 4017-M16x120-8.8, galv.	
	2		Hexagonal nut ISO 7040 M16 gr. 10, galv.	
	2		Washer ISO 7094 / DIN 440-R 17.5 mm, galv.	
	1		Spacer plates 115x250 mm, thickness to be adjusted H 20 web thickness	
	8		Steel nail 50x3.5 mm, galv.	
CT_M16_07			SCR Timber Beam Bearing – 1× laminated timber beam 80x200 mm – set	
	2		Hex Head Bolt ISO 4017-M16x120-8.8, galv.	
	2		Hexagonal nut ISO 7040 gr. 10, galv.	
	2		Washer ISO 7094 / DIN 440-R 17.5 mm, galv.	
CT_M16_08			SCF 60 Platform Beam Support EU – double H 20 Beam – set	
	2		Hex Head Bolt ISO 4017-M16x180-8.8, galv.	8.8
	2		Hexagonal nut ISO 7040 M16 gr. 10, galv.	10*
	2		Washer ISO 7094 / DIN 440-R 17.5 mm, galv.	
	3		Spacer plates 115x250 mm, thickness to be adjusted H 20 web thickness	

Connection types				
Type	Qty	Code	Description	Grade
	12		Steel nail 50x3.5 mm, galv.	
CT_M20_01			M20 – nut	
	1		Hexagonal nut ISO 7040 – M20 gr. 10, galv.	10.9/10
CT_M20_02			M20 – connector for SCR Panel Rib	
	1		Hex Head Bolt ISO 4762-M20x50-8.8, galv.	8.8
CT_M20_03			M20 – connector for cladding panels	
	1		Hex Head Bolt ISO 4762-M20x50-8.8, galv.	8.8
	1		Hexagonal nut ISO 7040 – M20 gr. 10, galv.	10*
CT_M20_04			M20 – connector for cladding panels and extension panel bearing	
	1		Hex Head Bolt ISO 4762-M20x70-8.8, galv.	8.8
	1		Hexagonal nut ISO 7040 – M20 gr. 10, galv.	10*
CT_M20_05			Panel joint reinforcement plates at return panel connector	
	1		Hex Head Bolt ISO 4014-M20x80-8.8, galv.	8.8
	1		Hexagonal nut ISO 7040 – M20 gr. 10, galv.	10*
	1	611903	SCR G2 Panel Joint Reinforcement plate	
CT_M20_06			M20 – connector for SCR Panel Rib 60	
	1		Hex Head Bolt ISO 4762-M20x90-8.8, galv.	8.8
CT_M20_07			Standard IK-M-connection without Spacer Sleeve IK Waler M	
	1	608617	Hex. Bolt ISO 4014-M20x110-10.9 galvanized	10.9/10
	1	608618	Self-locking Nut ISO 7040-M20-10 galvanized	
CT_M20_08			Standard IK-M-connection with Spacer Sleeve IK Waler M	
	1	608617	Hex. Bolt ISO 4014-M20x110-10.9 galvanized	10.9/10
	1	608618	Self-locking Nut ISO 7040-M20-10 galvanized	
	1	608498	Spacer Sleeve IK Waler M	
CT_M20_09			M20 – IK-M-connection with Bolt Sleeve Ø30	
	1	608617	Hex. Bolt ISO 4014-M20x110-10.9 galvanized	10.9/10
	1	608618	Self-locking Nut ISO 7040-M20-10 galvanized	
	1	611720	Bolt Sleeve Ø30	
CT_M20_10			Panel joint reinforcement plates at panel joint	
	1		Hex Head Bolt ISO 4014-M20x110-10.9, galv.	10.9/10
	1	608618	Self-locking Nut ISO 7040-M20-10 galvanized	
	2	611903	SCR Panel Joint Reinforcement Plate	
CT_M20_11			M20 – connector for cladding panels and spreader beam	
	1	612509	Hex Socket Head Cap Screw DIN EN ISO 4762-M20x150-8.8, galv.	8.8
	1	608618	Self-locking Nut ISO 7040-M20-10 galvanized	10*
CT_M20_12			M20 – IK-M-Climbing Rail Stiffener Plate connection without Bolt Sleeve Ø30	
	1	612557	Hex Head Bolt ISO 4014-M20x180-10.9, galv.	10.9/10
	1	608618	Self-locking Nut ISO 7040-M20-10 galvanized	
CT_M20_13			M20 – IK-M-Climbing Rail Stiffener Plate connection with Bolt Sleeve Ø30	
	1	612557	Hex Head Bolt ISO 4014-M20x180-10.9, galv.	10.9/10
	1	608618	Self-locking Nut ISO 7040-M20-10 galvanized	
	1	611720	Bolt Sleeve Ø30	
CT_M20_14			M20 – Panel joint reinforcement plates at 45° return panel connector	

Connection types				
Type	Qty	Code	Description	Grade
	1		Hexagonal nut ISO 7040 – M20 gr. 10, galv.	10.9/10
	1	611903	SCR Panel Joint Reinforcement Plate	
CT_M24_01			M24 – IK-M- connection	
	1	609084	Hex Head Bolt ISO 4014-M24x110-10.9, galv.	10.9/10
	1	612512	Hexagonal nut ISO 7040 M24 gr. 10, galv.	
CT_M24_02			M24 – IK-M-Climbing Rail Stiffener Plate connection	
	1		Hex Head Bolt ISO 4014-M24x180-10.9, galv.	10.9/10
	1	612512	Hexagonal nut ISO 7040 M24 gr. 10, galv.	
CT_CSK_M16_01			Connection guide box	
	1		Countersunk Bolt ISO 10642-M16x40-8.8, galv.	8.8/8
	1		Hexagonal nut DIN 985 M16 gr. 10, galv.	
CT_CSK_M20_01			M20 – IK-M-Climbing Rail Stiffener Plate connection without Bolt Sleeve Ø30	
	1		Countersunk Bolt ISO 10642-M20x140-10.9, galv.	10.9/10
	1		Hexagonal nut DIN 985** M20 gr. 10	
CT_CSK_M20_02			M20 – IK-M-Climbing Rail Stiffener Plate connection with Bolt Sleeve Ø30	
	1		Countersunk Bolt ISO 10642 – M20x140-10.9, galv.	10.9/10
	1		Hexagonal nut DIN 985** M20 gr. 10	
	1	611720	Bolt Sleeve Ø30	
CT_CSK_M20_03			M20 – fixing of SCR extension panel stopper	
			Countersunk Bolt ISO 10642-M20x40-8.8, galv.	8.8 / 8
CT_CSK_M20_04			M20 – fixing of SCR extension panel bearing (countersunk bolts)	
	1		Countersunk Bolt ISO 10642-M20x60-8.8, galv.	8.8/8
	1		Hexagonal nut DIN 985 – M20 gr. 10, galv.	
CT_WC_01			Flat head timber screw 4x25 mm	
	1		Flat head timber screw 4x25 mm self-drilling, galv.	
CT_WC_02			Timber screw 5x35 mm	
	1		Countersunk timber screw 5x35 mm self-drilling, galv.	
CT_WC_03			Flat head self-taping screw 5x35 mm	
	1		Flat head self-taping screw 5x35 mm, galv.	
CT_WC_04			Steel angle and 8x timber screw 5x35 mm	
	1		Steel angle 90x90x65 mm, with rib, galv.	
	8		Countersunk timber screw 5x35 mm self-drilling, galv.	
CT_WC_05			Timber screw 5x60 mm	
	1		Countersunk timber screw 5x60 mm self-drilling, galv.	
CT_WC_06			Connection plywood (21 mm) @ H 20-beams / DU-AL beams	
	2		Countersunk timber screw 5x60 mm self-drilling, galv.	
CT_WC_07			Connection cladding panel @ plywood or timber	
	1	611902	SCR Panel Deck Connection Washer	
	1		Countersunk timber screw 5x60 mm self-drilling, galv.	
CT_WC_08			Timber screw 5x80 mm, TORX	
	1		Countersunk timber screw 5x80 mm, TORX, self-drilling, galv.	
CT_WC_09			Connection timber boards (5cm) @ H 20-beams / DU-AL beams	
			2 screws per board and beam	
	2		Countersunk timber screw 5x80 mm self-drilling, galv.	

Connection types				
Type	Qty	Code	Description	Grade
CT_WC_10			Timber screw 8x60 mm	
	2		Countersunk timber screw 8x60 mm self-drilling, galv.	
CT_WC_11			SCR IK M/L timber beam Connector cpl.	
	1	611401	SCR IK Timber Beam Connector	
	2		Countersunk timber screw WÜRTH ASSY plus VG 6x160 mm self-drilling, galv.	
CT_WC_12			Hinge belt for traps	
	1	611847	Belt 50 mm red – 50 cm	
	1		Counter plate plywood Ø21, 65x100 mm	
	4		Countersunk timber screw 5x40 mm self-drilling, galv.	
	4		Flat head timber screw 5x30 self-drilling, galv.	
CT_WC_13			Hinge for traps	
	1		Hinge 200x35 mm, galv.	
	4		Countersunk timber screw 5x30 mm self-drilling, galv.	
	2		Hex Head Bolt ISO 4017-M5x35-8.8, galv.	
	2		Washer ISO 7094 / DIN 440-R 5.5 mm, galv.	
	2		Hexagonal nut ISO 4032 – M5 cl 8, galv.	
CT_WC_14			Packer plate for SCR platform bracket timber – 1× H 20 Beam – set	
	1		Spacer plates 115x250 mm, thickness to be adjusted H 20 web thickness	
	8		Steel nail 50x3.5 mm, galv.	
CT_WC_15			Roofing felt nail 3,5x25 mm	
	1		Roofing felt nail 3,5x25 mm, galv.	
CT_WC_16			Timber screw 6x100 mm, TORX	
	1		Countersunk timber screw 6x100 mm, TORX, self-drilling, galv.	
CT_WC_17			Timber screw 4.5x25 mm, TORX	
	1		Countersunk timber screw 4.25x25 mm TORX self-drilling, galv.	

5.3 Climbing rails and vertical structure

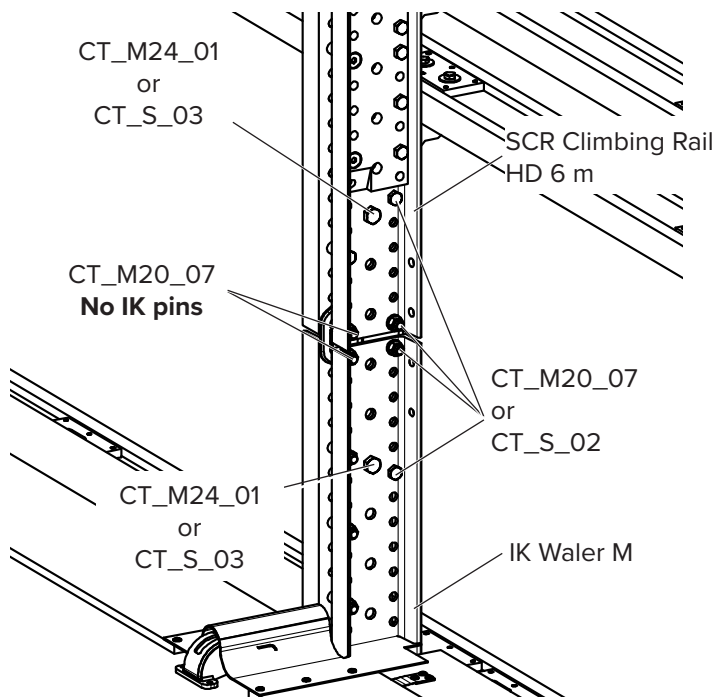
The rails are made of IK Walers M or IK Walers L attached together using bolts and nuts, spacer sleeves and support bobbins. The fasteners vary depending on the type of IK Waler used to form the rails.



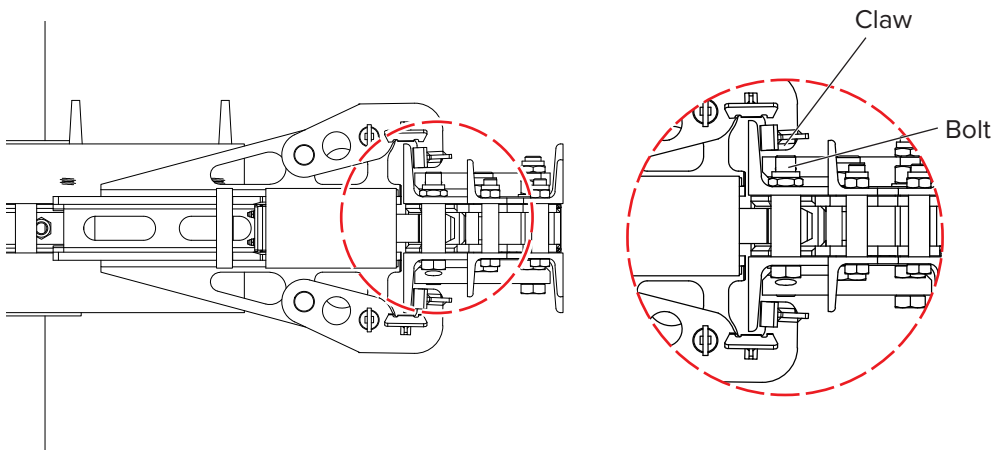
Each SAFESCREEN G2 unit is specifically designed to suit the site requirements, therefore the connections shown are typical only. For more information regarding the required connections for a specific SAFESCREEN G2 unit refer to the supplied design schemes.



Do not use IK pins on the inside hole positions of the IK Waler M. Only bolts and nuts can be used on the inside hole positions of the rail to avoid clashes with the claws of the climbing brackets.



The clearance between the claws of the climbing brackets and the bolts can be seen below.



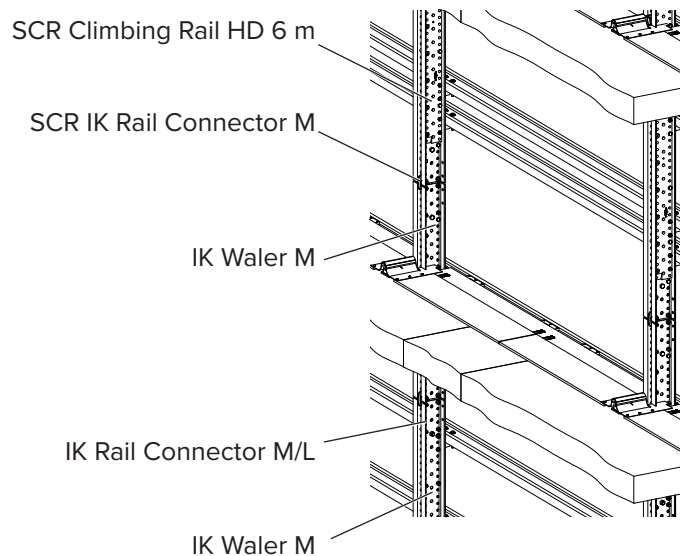
The SCR Climbing Rail HD 6 m (code:612205) is a standard length of pre-assembled IK Walers M, supplied with stiffener plates on both sides.

Extensions to the height of the unit can be done using standard lengths of IK Walers M and/or IK Walers L, also pre-assembled, to suit the requirements of the site.



For the actual assembly setup, refer to the supplied design scheme.

The IK Walers M can be connected end-to-end using the SCR IK Rail Connector M (code:611970), see page 64. The IK Walers L can be connected end-to-end to the IK Walers M using the IK Rail Connector M/L (code:611235), see page 65.

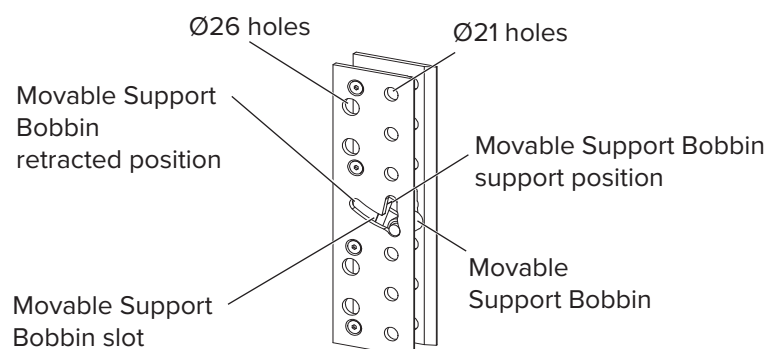


For more information regarding IK Walers, refer to the INFRA-KIT User Guide.

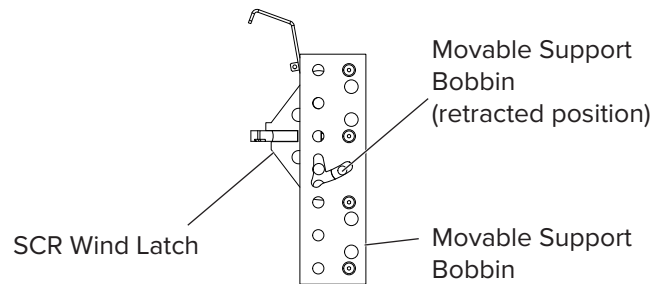
5.3.1 Movable Support Bobbin

The Movable Support Bobbin (code:611820) is attached to the rail of the SAFESCREEN G2 unit and it has a retractable bobbin that is used to support the unit and allows for 250 mm climbing increments. The Movable Support Bobbin replaces a standard intermediate climbing bolt in the climbing rail and allows for the installation of the SCR Wind Latch (code:611810). The Movable Support Bobbin is installed in the climbing rail and can carry the loads of the SAFESCREEN G2 unit during climbing. The Movable Support Bobbin can be pushed aside along the slot in the side plates to give way for the SCR Wind Latch to be installed.

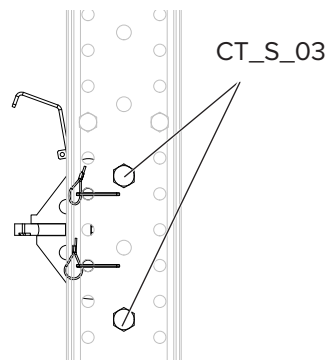
When supporting the unit, the Movable Support Bobbin slides upwards to the support position.



Shown below is the Movable Support Bobbin with the Movable Support Bobbin in its retracted position to allow the SCR Wind Latch to be installed.

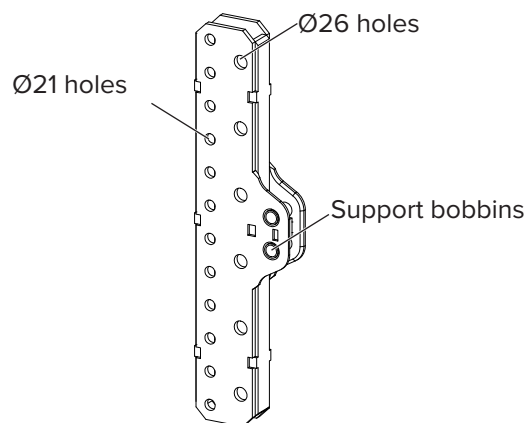


The connection of the Movable Support Bobbin to the rail is shown below. The SCR Wind Latch is also shown to illustrate the interaction between both components. For more information regarding the typical connections see page 57.



5.3.2 SCR IK Rail Connector M

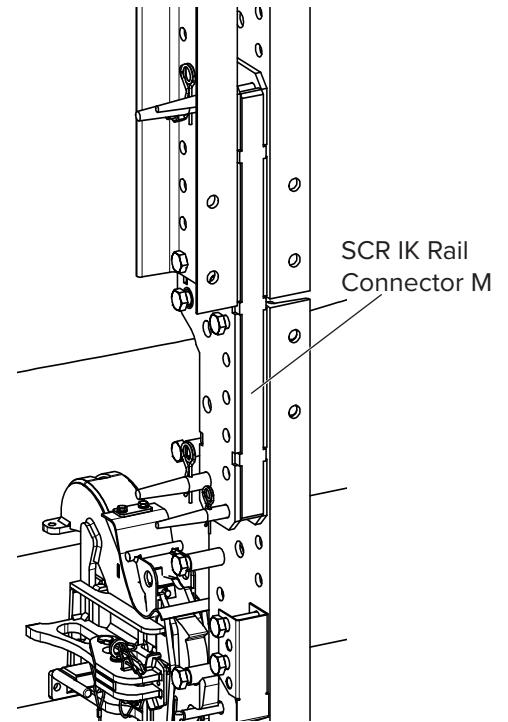
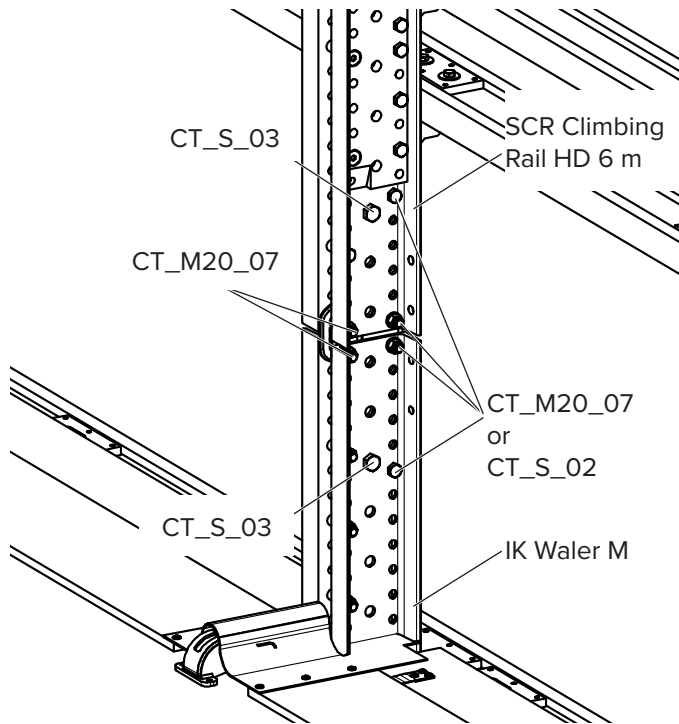
The SCR IK Rail Connector M (code:611970) is used to connect two IK Waler M end-to-end.



Typically, the SCR IK Rail Connector M can be attached to the IK Waler M using with the following:

- 2no. CT_M20_07
- 2no. CT_S_03
- 4no. CT_S_02

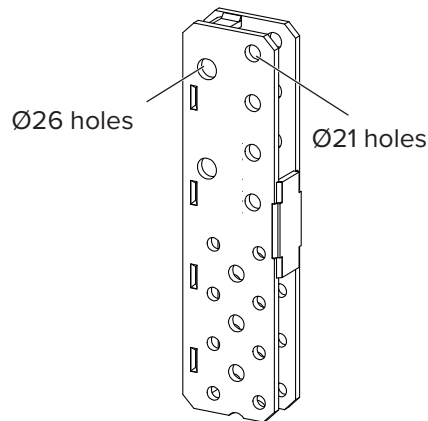
The CT_S_03 connection cannot be used on the inside of the IK Waler M. For more information regarding the typical connections see page 57.



For more information regarding the required fasteners including those to be removed, refer to the supplied design scheme.

5.3.3 IK Rail Connector M/L

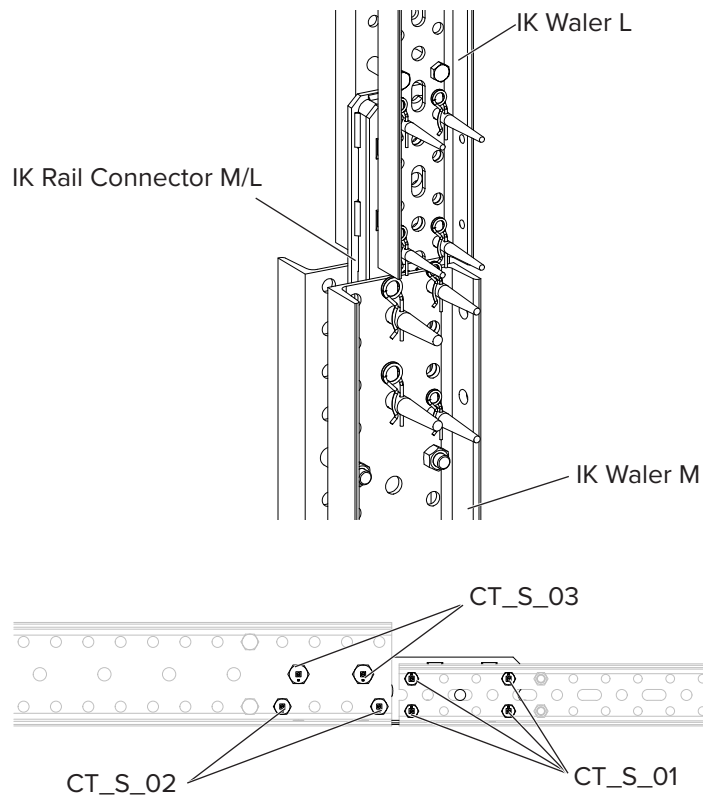
The IK Rail Connector M/L (code:611235) is used to do an end-to-end connection between an IK Waler M and an IK Waler L.



The IK Rail Connector M/L is typically attached to the walers using with the following:

- CT_S_03
- CT_S_02
- CT_S_01

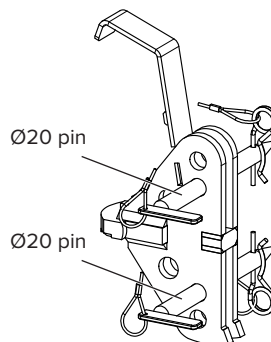
The connections shown above can be replaced by bolts if required. For more information regarding the typical connections see page 57.



For more information regarding the required fasteners, refer to the supplied design scheme.

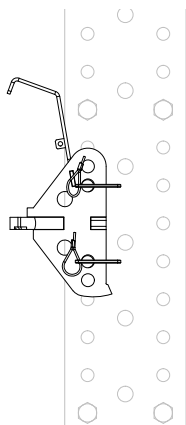
5.3.4 SCR Wind Latch

The SCR Wind Latch (code:611810) helps to transfer high horizontal forces from the vertical structural members to the climbing bracket in level L0.

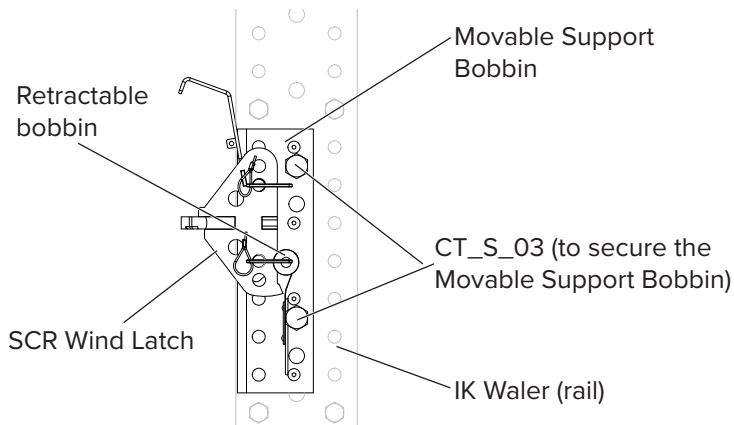


Shown below is a typical application of the SCR Wind Latch in conjunction with the Movable Support Bobbin (code:611820).

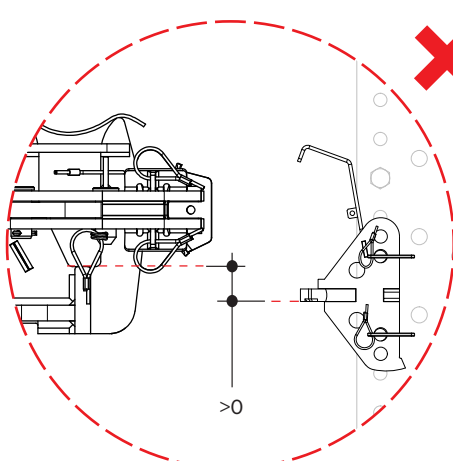
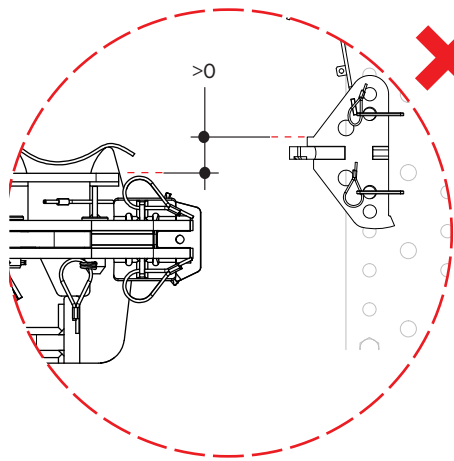
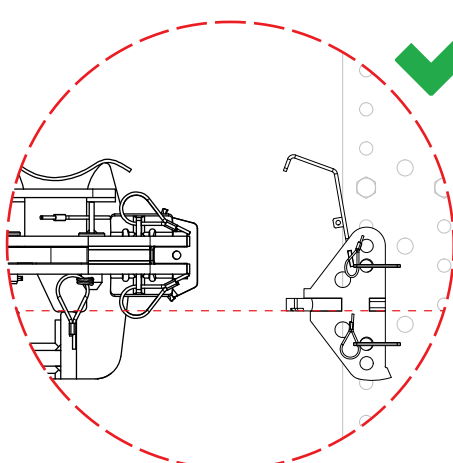
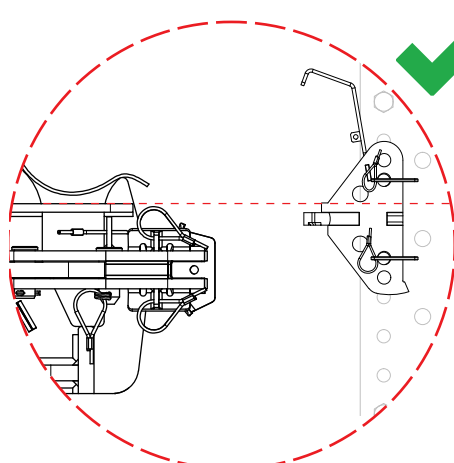
SCR Wind Latch without
Movable Support Bobbin



SCR Wind Latch with
Movable Support Bobbin

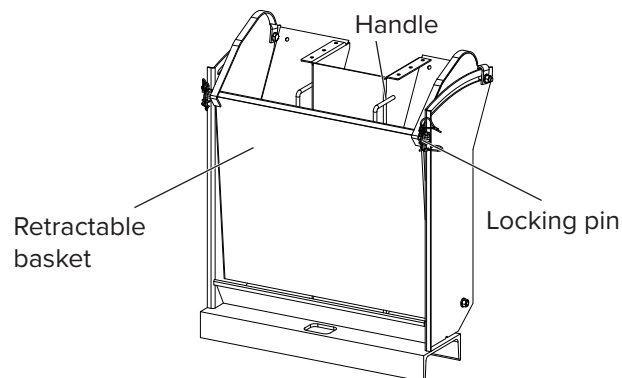


Check if the SCR Wind Latch (code:611810) is properly installed. The upper and lower limits are shown below. These limits are applicable when using any type of climbing bracket.

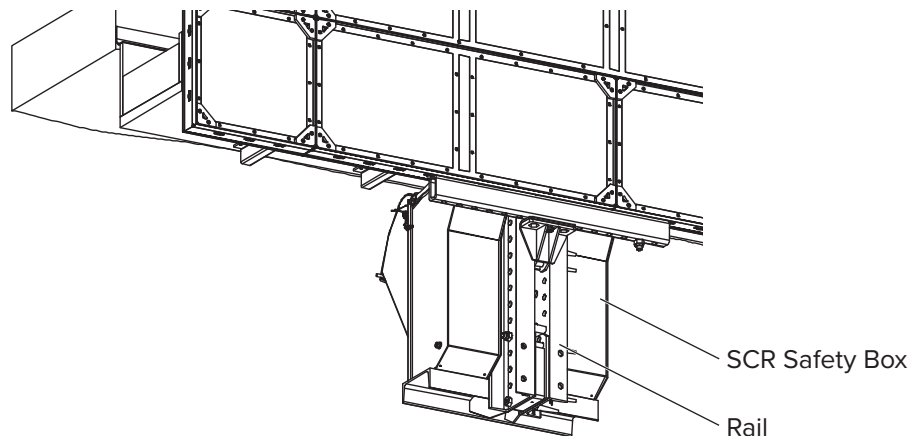


5.3.5 SCR Safety Box

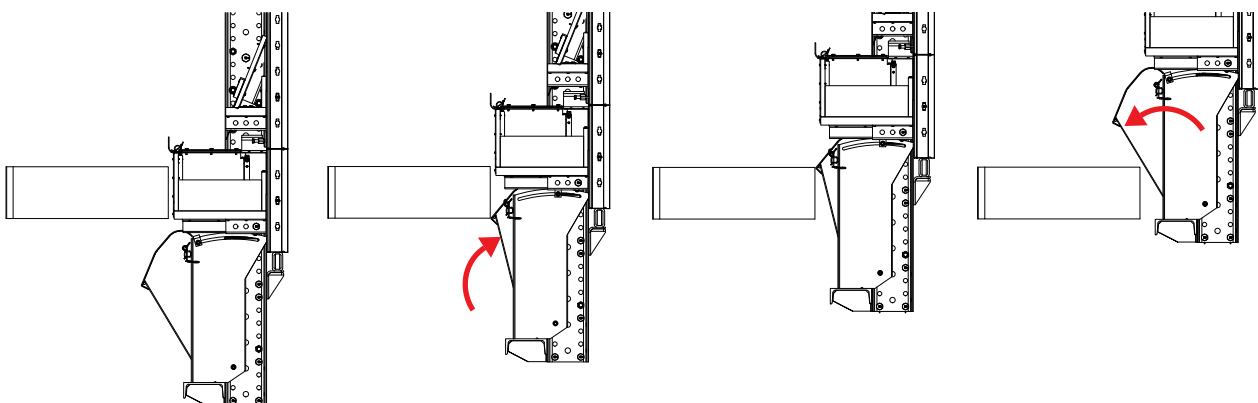
The SCR Safety Box (code:611450) is placed at the bottom end of the rail and is designed to collect small items like tools and debris falling through gaps near the rail.



The fasteners used to secure the SCR Safety Box (code:611450) may vary depending on the IK Waler used to form the vertical structural elements. Please refer to the supplied design scheme.



During climbing operations with the SCR Safety Box, the operator must manually retract the lid of the SCR Safety Box and push the lid in before climbing the unit, after which the lid must be manually moved back to the open position.

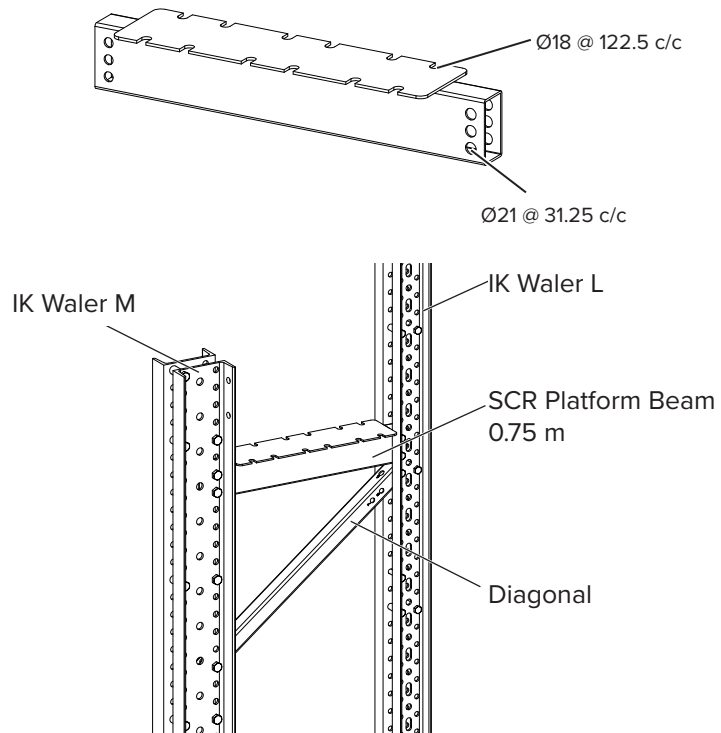


During transportation, the SCR Safety Box (code:611450) must be kept in the retracted position and secured using the included latches.

Before climbing operations ensure that the SCR Safety Box is empty and can operate as illustrated.

5.3.6 SCR Platform Beam 0.75 m

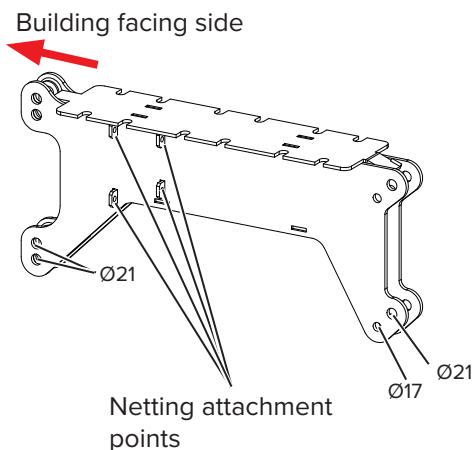
The SCR Platform Beam 0.75 m (code:612260) is used to support the platform on SAFESCREEN G2 truss units.



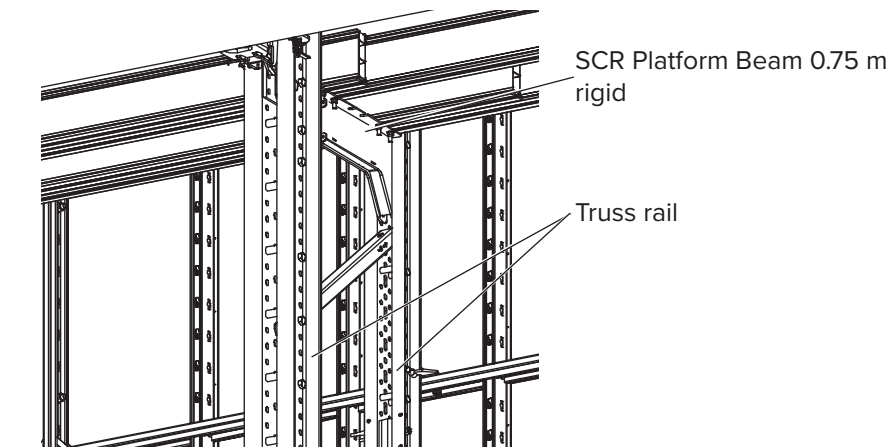
5.3.7 SCR Platform Beam 0.75 m rigid

The SCR Platform Beam 0.75 m rigid (code:612263) is used to support the platform on SAFESCREEN G2 truss units.

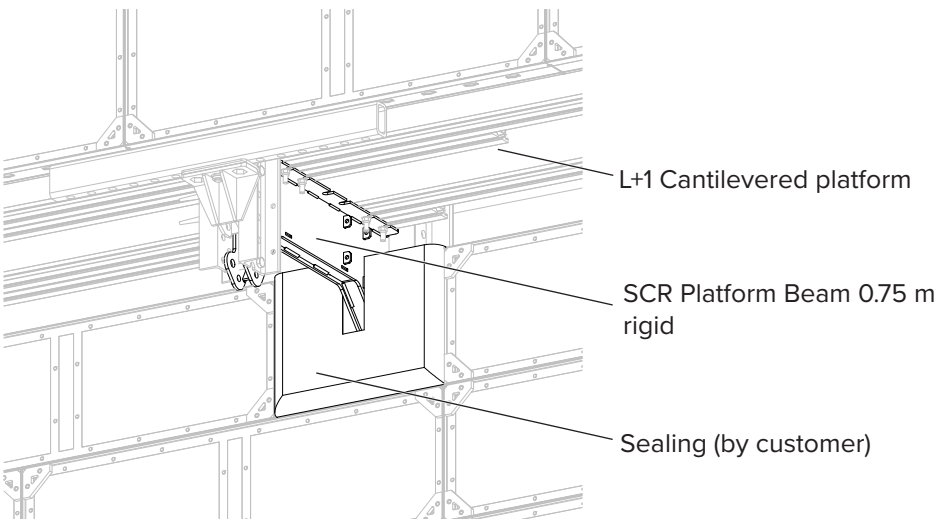
The SCR Platform Beam 0.75 m rigid has attachment points for debris netting or tarpaulin. The SCR Platform Beam 0.75 m rigid must be installed so that the netting attachment points face the building.



The SCR Platform Beam 0.75 m rigid can be used to form the SAFESCREEN G2 truss unit as shown below.

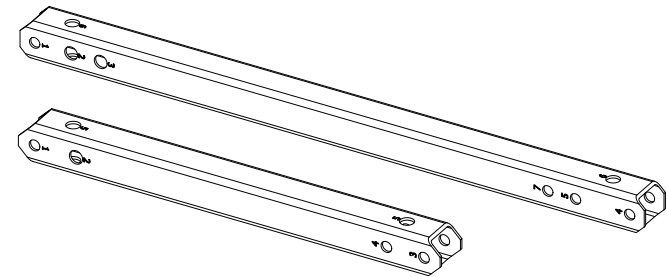


The SCR Platform Beam 0.75 m rigid can also be used for the L+1 cantilevered platform, as shown below.



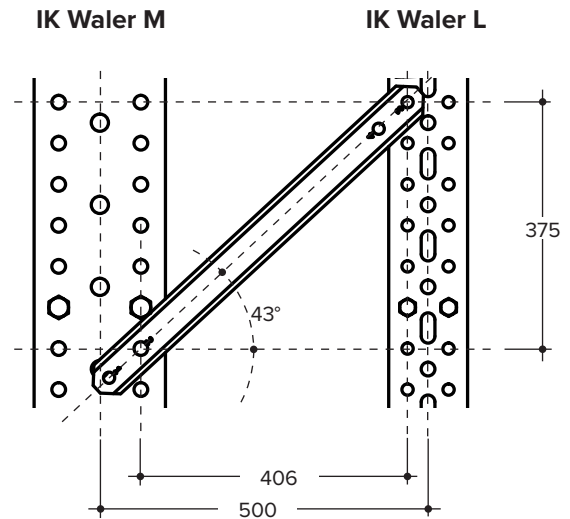
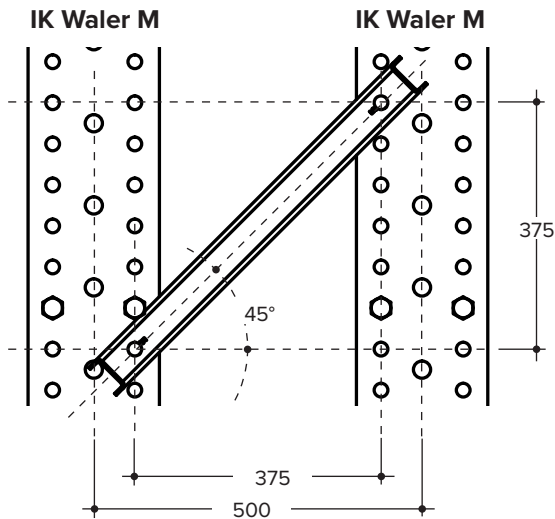
5.3.8 SCF 60 Diagonals

The SCF 60 Diagonals are used to stiffen the assembly. Each diagonal has numbered hole positions (Ø21 and Ø17) which allow for the SCF 60 Diagonal to be attached to an IK Waler L or an IK Waler M.



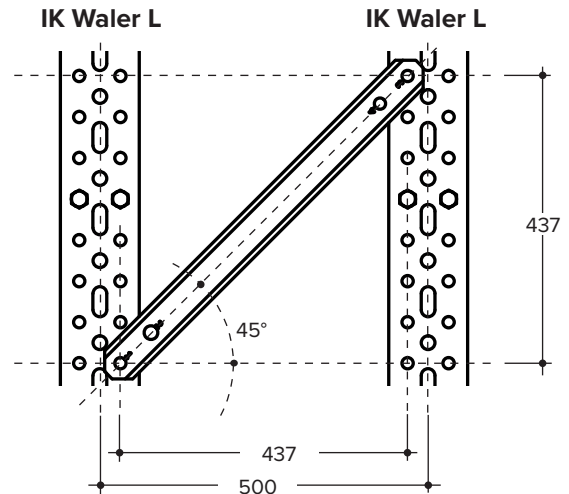
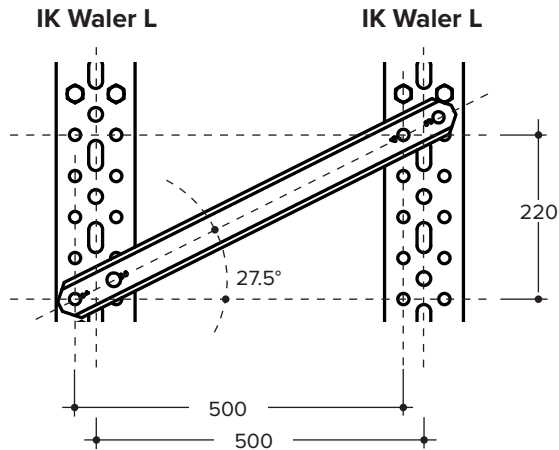
SCF 60 Diagonal		
Hole no.	Diameter [mm]	
	50x50	75x75
1	17	17
2	21	21
3	17	21
4	17	17
5	21	17
6	---	21
7	---	17

The SCF 60 Diagonal 75x75 (code:612130) is used in conjunction with the SCR Platform Beam 0.75 m (code:612260) or with the SCR Platform Beam 0.75 m rigid (code:612263) in truss units, see page 69.



SCF 60 Diagonal 50x50			
IK Waler M		IK Waler M	
Diagonal hole	Connection	Diagonal hole	Connection
5	CT_M20_07 or CT_S_02	5	CT_M20_07 or CT_S_02

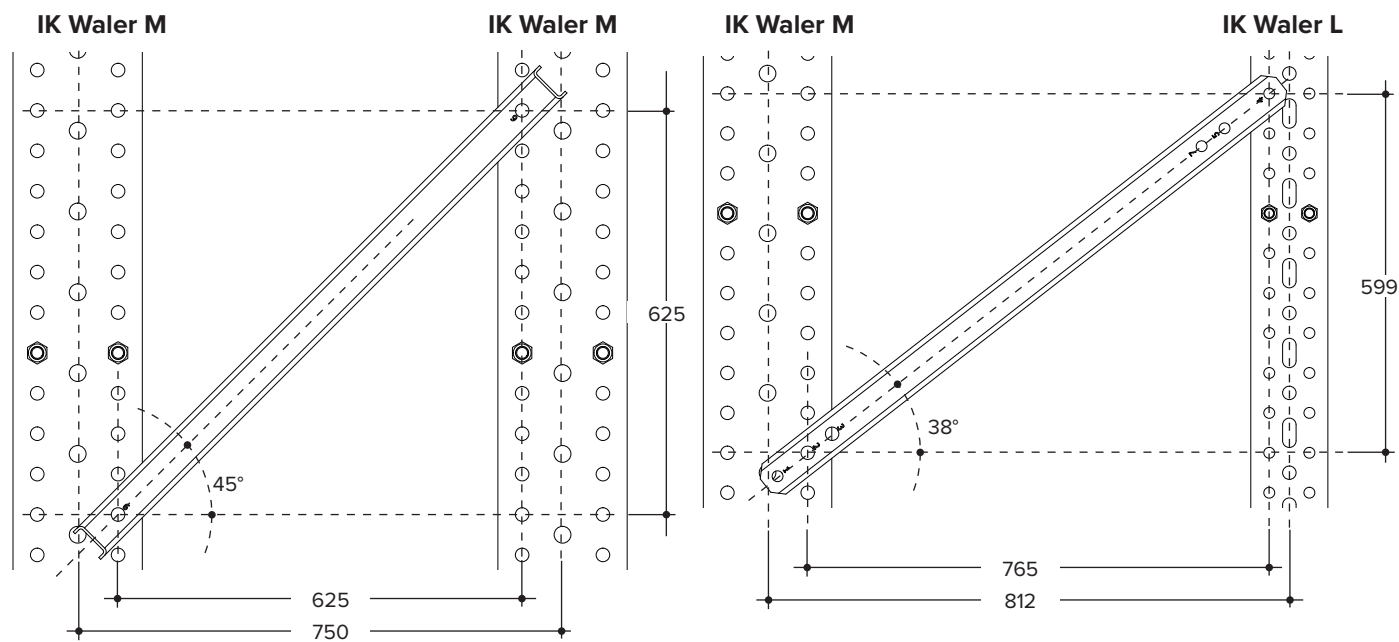
SCF 60 Diagonal 50x50			
IK Waler M		IK Waler L	
Diagonal hole	Connection	Diagonal hole	Connection
2	CT_M20_07 or CT_S_02	3	CT_M16_04 or CT_S_01



SCF 60 Diagonal 50x50			
IK Waler L		IK Waler L	
Diagonal hole	Connection	Diagonal hole	Connection
1	CT_M16_04 or CT_S_01	4	CT_M16_04 or CT_S_01

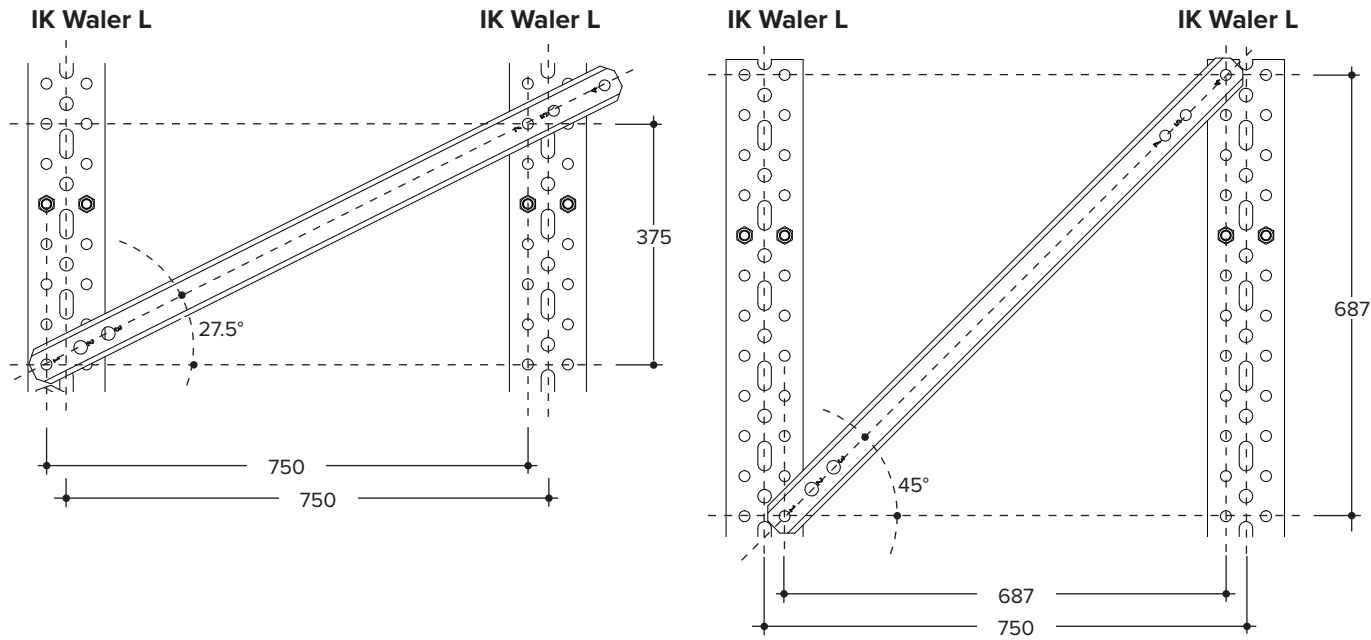
SCF 60 Diagonal 50x50			
IK Waler L		IK Waler L	
Diagonal hole	Connection	Diagonal hole	Connection
1	CT_M16_04 or CT_S_01	3	CT_M16_04 or CT_S_01

The different applications of the SCF 60 Diagonal 75x75 (code:612130), depending on the IK Waler used, can be seen below.



SCF 60 Diagonal 75x75			
IK Waler M		IK Waler M	
Diagonal hole	Connection	Diagonal hole	Connection
6	CT_M20_07 or CT_S_02	6	CT_M20_07 or CT_S_02

SCF 60 Diagonal 75x75			
IK Waler M		IK Waler L	
Diagonal hole	Connection	Diagonal hole	Connection
2	CT_M20_07 or CT_S_02	4	CT_M16_04 or CT_S_01



SCF 60 Diagonal 75x75			
IK Waler L		IK Waler L	
Diagonal hole	Connection	Diagonal hole	Connection
1	CT_M16_04 or CT_S_01	7	CT_M16_04 or CT_S_01

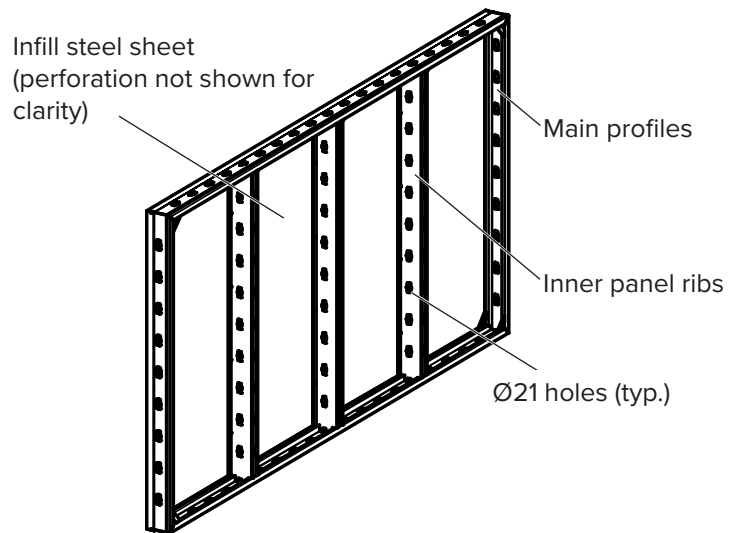
SCF 60 Diagonal 75x75			
IK Waler L		IK Waler L	
Diagonal hole	Connection	Diagonal hole	Connection
1	CT_M16_04 or CT_S_01	4	CT_M16_04 or CT_S_01

5.4 Cladding

5.4.1 SCR Cladding Panel

One of the cladding options for the SAFESCREEN G2 units. Standard sizes of the SCR Cladding Panels allow for a wide range of configurations of the cladding area.

The SCR Cladding Panels have a perforated steel infill sheet attached to the frame of the panel to provide the required cladding. Note that this infill sheet is not shown in any illustration for clarity purposes.



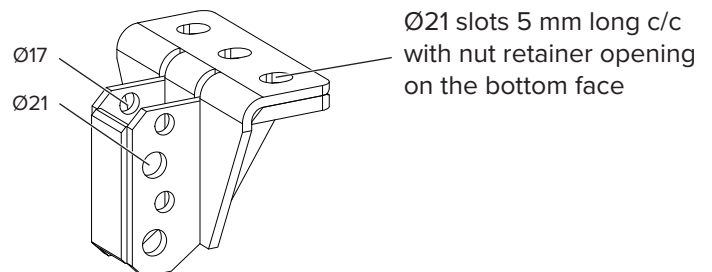
The connections between SCR Cladding Panels will vary depending on the job requirements. Refer to the supplied design scheme for more details.



The SCR IK Flange Cladding Panel Connectors must always be in pairs. The SCR Cladding Panels must be secured to the rail using 2no. SCR IK Flange Cladding Panel Connectors on both sides of the connection to the vertical structural elements.

5.4.2 SCR Cladding Panel Bearing

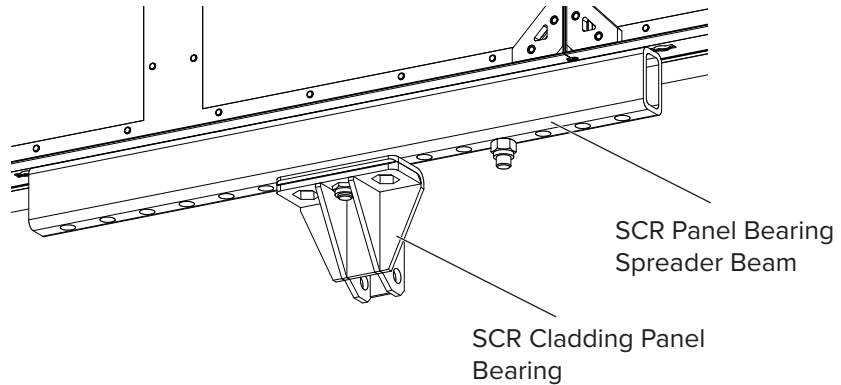
Used in SAFESCREEN G2 units that use SCR Cladding Panels. The SCR Cladding Panel Bearing (code:612056) is attached to the rail to transfer the vertical load of the cladding to the rail.



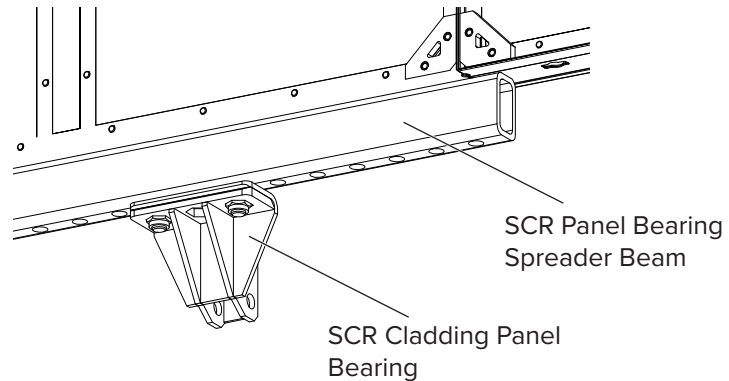
The SCR Panel Bearing Spreader Beam (code:612059) is used in conjunction with the SCR Cladding Panel Bearing. The complete weight of the cladding panel assembly rests on the SCR Cladding Panel Bearing at the bottom. The SCR Panel Bearing Spreader Beam is used if the SCR Cladding Panel Bearing is placed between two ribs or frame verticals of the cladding panel and if the weight of the complete set-up is such that the horizontal bottom frame of the panel might be overloaded. Please note that if a SCR Panel Bearing Spreader Beam is necessary on one vertical frame or mast of the SCF 60 unit, it must be used on the second as well.

The SCR Panel Bearing Spreader Beam can be attached to the SCR Cladding Panel Bearing using one of several options:

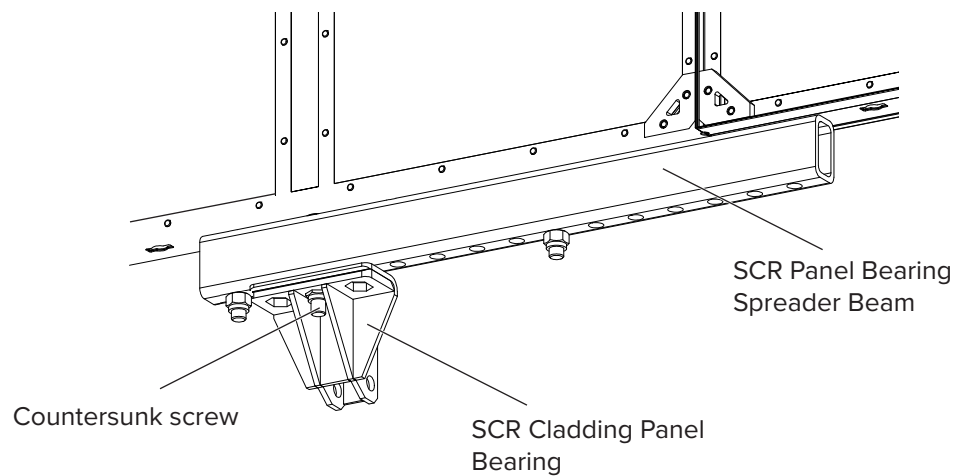
- Single bolt through spreader beam and panel. This is the preferred option, to be used when the centre hole of the cladding bearing matches with a hole in the panel.



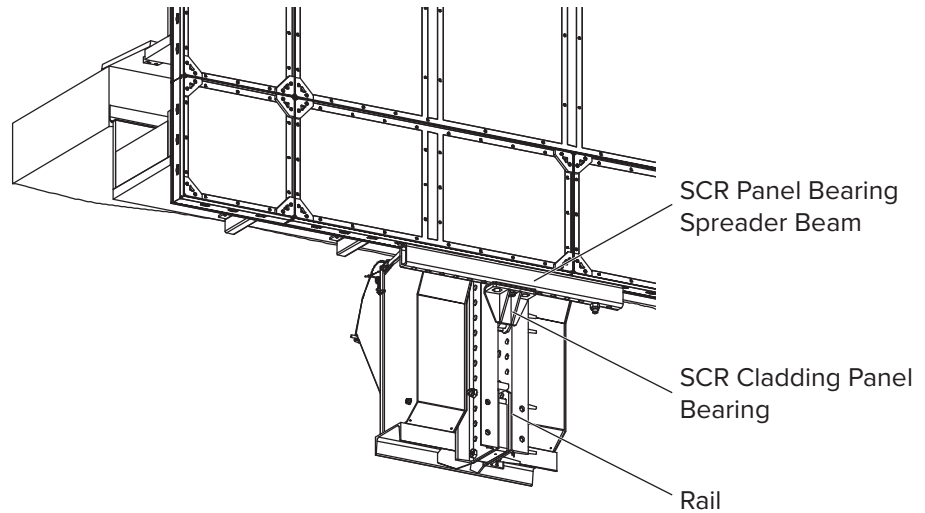
- Double bolt through spreader beam and panel. To be used when the two side holes of the cladding panel bearing match with two holes in the panel.



- Single countersunk bolt over the centre of the cladding panel bearing and 2no. additional M20x110 bolts beside the bearing. To be used when a panel rib or panel joint is directly above the cladding panel bearing.

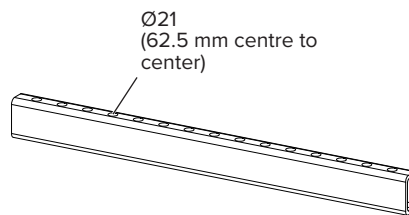


The fasteners used to secure the SCR Cladding Panel Bearing (code:612056) may vary depending on the SAFESCREEN G2 unit. Please refer to the supplied design scheme.

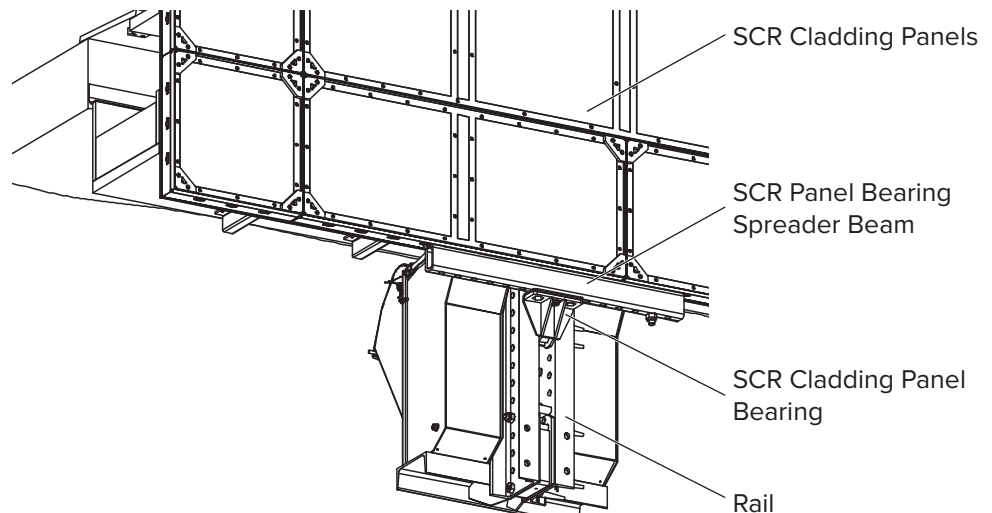


5.4.3 SCR Panel Bearing Spreader Beam

It is used to support the weight of the cladding when the SCR Cladding Panel Bearing (code:612056) is positioned between panel ribs and / or panel joints. It collects the vertical loads coming through the ribs / joints and transfers it to the rail.



The SCR Panel Bearing Spreader Beam (code:612059) is attached to the SCR Cladding Panels using 2no. CT_M20_11.

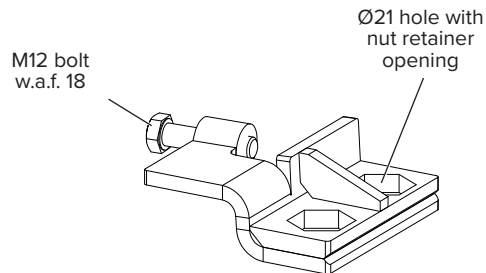


The SCR Panel Bearing Spreader Beam (code:612059) must be positioned so that it supports both ribs of the SCR Cladding Panels or the vertical joint.

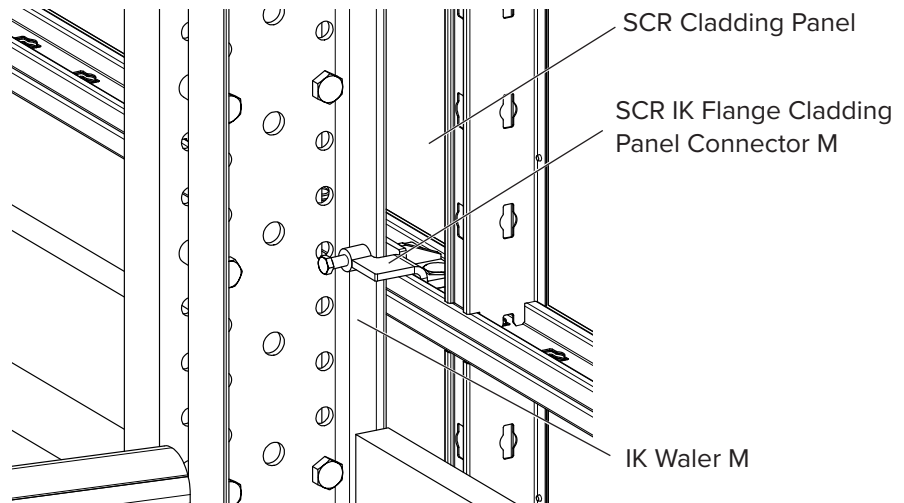
If a rib of a SCR Cladding Panel is directly above the plate of the SCR Cladding Panel Bearing (code:612056) use countersunk screws to connect the SCR Panel Bearing Spreader Beam to the SCR Cladding Panel Bearing.

5.4.4 SCR IK Flange Cladding Panel Flange Connector M

Used to connect the SCR Cladding Panels to the IK Waler M. Only used to restrain the panels horizontally. The SCR Cladding Panels can be attached to the SCR IK Flange Cladding Panel Connector M (code:611540) using any of the Ø21 holes.



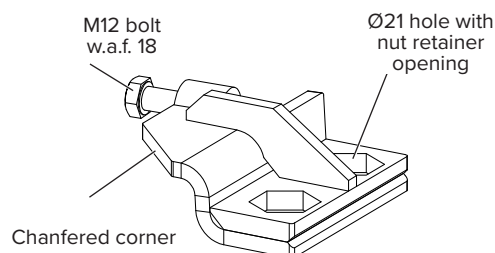
The SCR IK Flange Cladding Panel Connector M connects to the SCR Cladding Panels using 2no CT_M20_03. To secure the SCR IK Flange Cladding Panel Connector M to the rail tighten the captive M12 bolt against the flange of the IK Waler M.



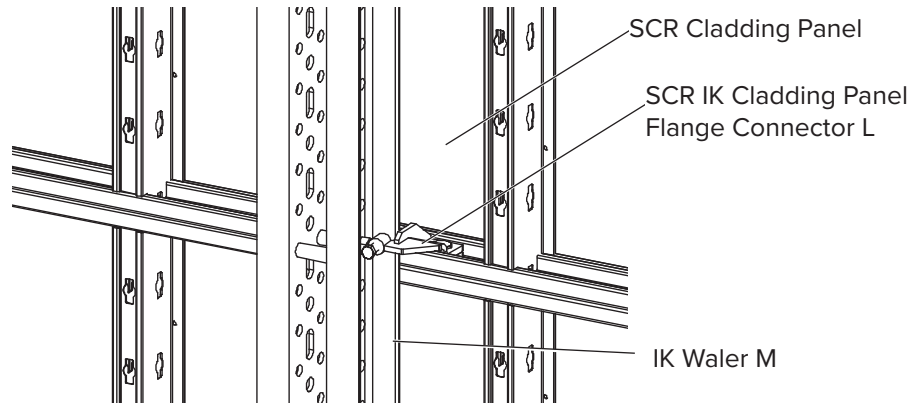
The SCR IK Flange Cladding Panel Connector M (code:611540) must always be used in pairs. The SCR Cladding Panels must be secured to the rail using 2no. SCR IK Flange Cladding Panel Connector M on both sides of the connection to the rail.

5.4.5 SCR IK Cladding Panel Flange Connector L

Used to connect the SCR Cladding Panels to the IK Waler L. The SCR IK Cladding Panel Flange Connector L (code:611545) can be differentiated from the SCR IK Flange Cladding Panel Connector M (code:611540) by the chamfered corner next to the M12 bolt.



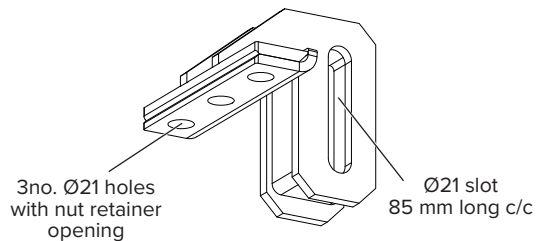
The SCR IK Cladding Panel Flange Connector L connects to the SCR Cladding Panels using 2no. CT_M20_03. To secure the SCR IK Cladding Panel Flange Connector L to the rail tighten the captive M12 bolt against the flange of the IK Waler L.



The SCR IK Cladding Panel Flange Connector L (code:611545) must always be used in pairs. The SCR Cladding Panels must be secured to the rail using 2no. SCR IK Flange Cladding Panel Connector M (code:611540) on both sides of the connection to the rail.

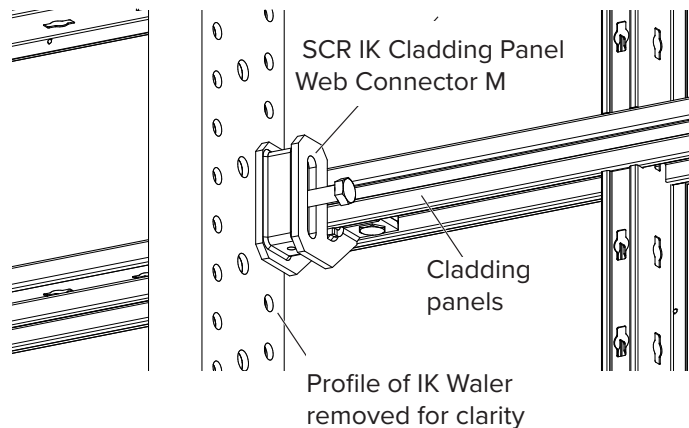
5.4.6 SCR IK Cladding Panel Web Connector M

The SCR IK Cladding Panel Web Connector M (code:611550) is used to connect SCR Cladding Panels to the IK Waler M as an alternative for when it is not possible to install the SCR IK Flange Cladding Panel Connector M (code:611540), see page 70, because it will clash with the profiles of the SCR Cladding Panels.



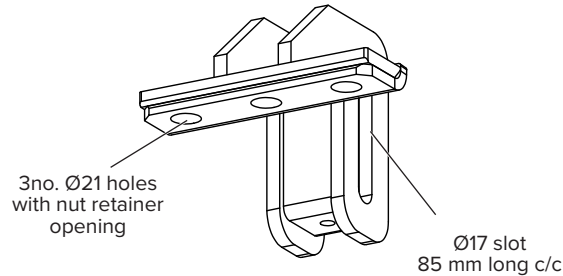
The SCR IK Cladding Panel Web Connector M is attached to the SCR Cladding Panels using 2no. CT_M20_03 and to the IK Waler M using the CT_M20_07 connection type.

Typically, the SCR IK Cladding Panel Web Connector M is used in every row of SCR Cladding Panels to secure the panels to the IK Waler M.



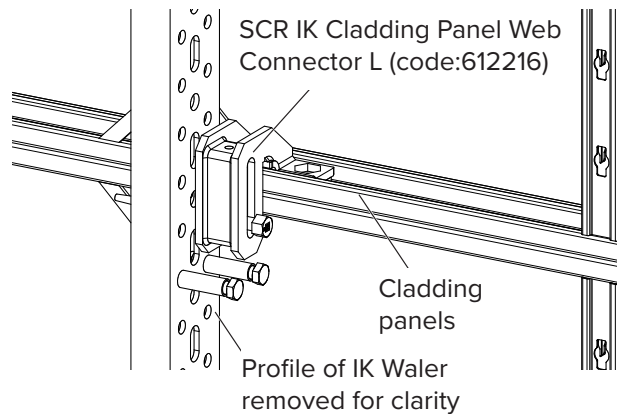
5.4.7 SCR IK Cladding Panel Web Connector L

The SCR IK Cladding Panel Web Connector L (code:612216) is used to connect SCR Cladding Panels to the IK Waler L as an alternative for when it is not possible to install the SCR IK Cladding Panel Flange Connector L (code:611545), see page 70, because it will clash with the profiles of the SCR Cladding Panels.



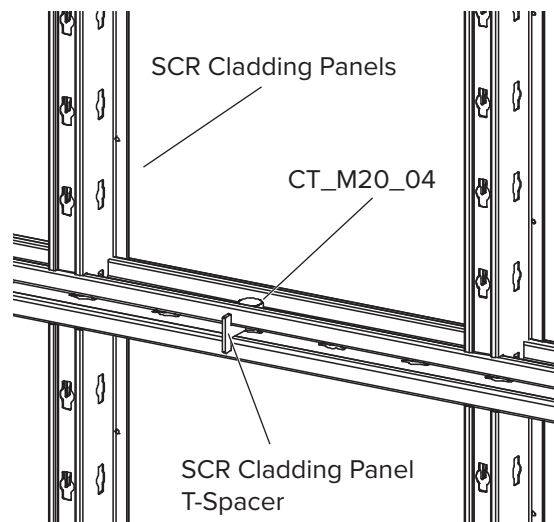
The SCR IK Cladding Panel Web Connector L is attached to the SCR Cladding Panels using 2no. CT_M20_03 and to the IK Waler L using the CT_M16_07 connection type.

Typically, the SCR IK Cladding Panel Web Connector L is used in every row of SCR Cladding Panels to secure the panels to the IK Waler L.



5.4.8 SCR Cladding Panel T-Spacer

The SCR Cladding Panel T-Spacer (code:611548) is used in SAFESCREEN G2 units with extendable panels. The SCR Cladding Panel T-Spacer is used to suspend the panel carrying the platform to a second panel to distribute the vertical loads between the panels. The position of the SCR Cladding Panel T-Spacer will be specified in the supplied design scheme.

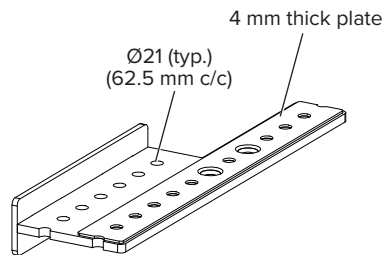




The SCR Cladding Panel T-Spacer (code:611548) is required to support panels that hold platforms against a second panel. Only use the SCR Cladding Panel T-Spacer where specified in the supplied design scheme.

5.4.9 SCR Extension Panel Bearing

The SCR Extension Panel Bearing (code:611962) is used in extendable SAFESCREEN G2 units to allow the extension panel to slide outwards or inwards thus extending or retracting the SAFESCREEN G2 unit.

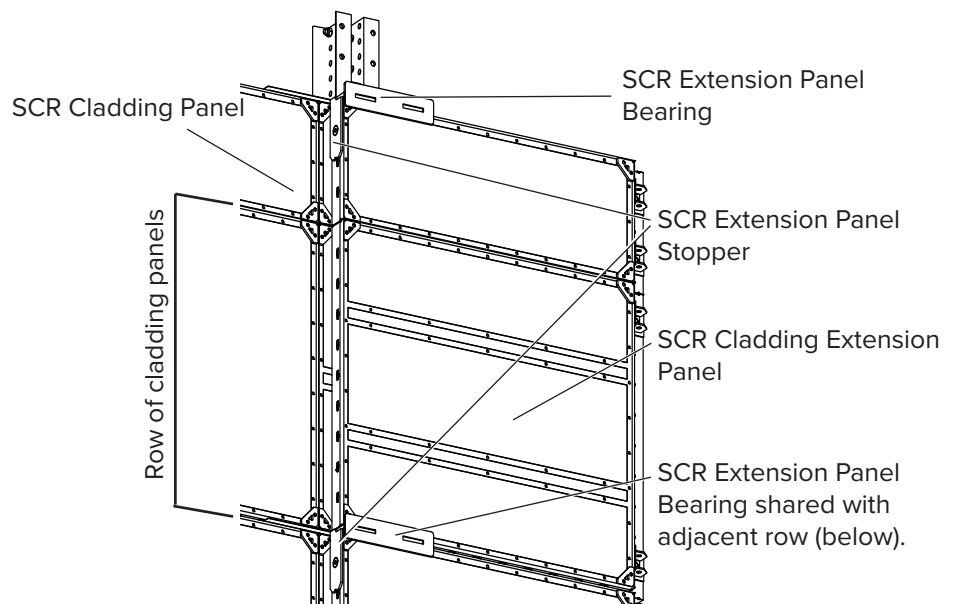


The SCR Extension Panel Bearing is attached to the SCR Cladding Panels. The SCR Extension Panel Bearing is attached to the SCR Cladding Panels using 2no. CT_M20_03. The cladding extension panels are locked in position using a CT_S_02 connection type.

Every row of SCR Cladding Panels must have a SCR Extension Panel Bearing on both the outer corners (top and bottom) with vertically adjacent rows sharing a common SCR Extension Panel Bearing. Any deviation from this rule, see example on next page, must be explicitly designed and stated in the design scheme.

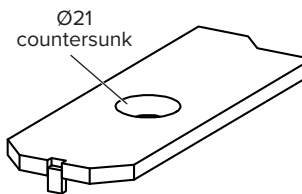
A web connector or a pair of flange connectors must be used at the same position as the SCR Extension Panel Bearing, so that every position of the SCR Extension Panel Bearing is attached to the IK Waler.

The bottom position of the SCR Extension Panel Bearing is supported by the SCR Cladding Panel Bearing (code:612056).



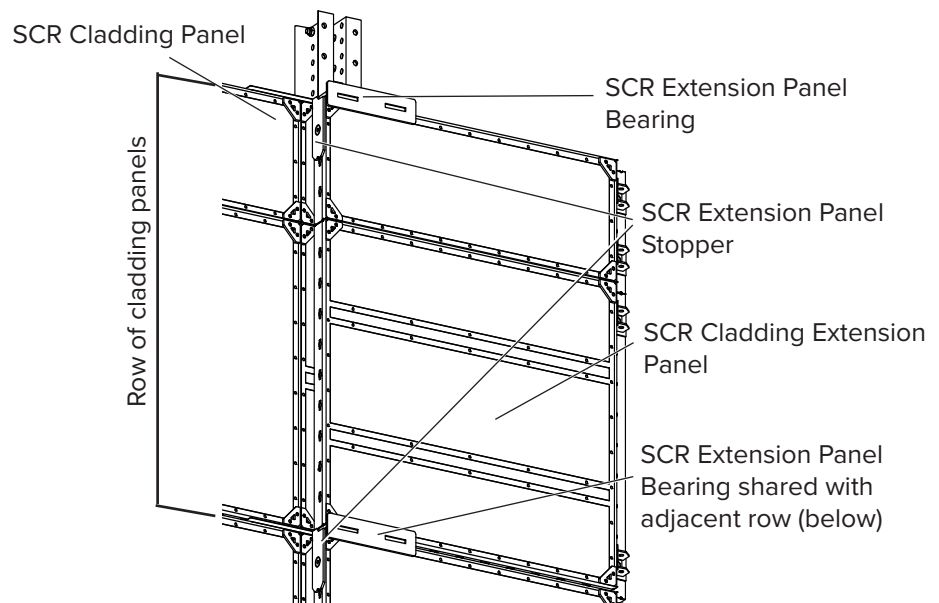
5.4.10 SCR Extension Panel Stopper

The SCR Extension Panel Stopper (code:611966) is used to prevent the SCR Cladding Extension Panel from overextending.



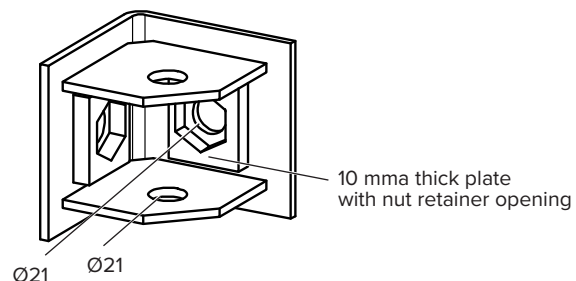
Every row of SCR Cladding Extension Panels must have a SCR Extension Panel Stopper on one of the inner corners (top or bottom).

The SCR Extension Panel Stopper is attached to the SCR Cladding Extension Panel using the CT_CSK_M20_03 connection type.

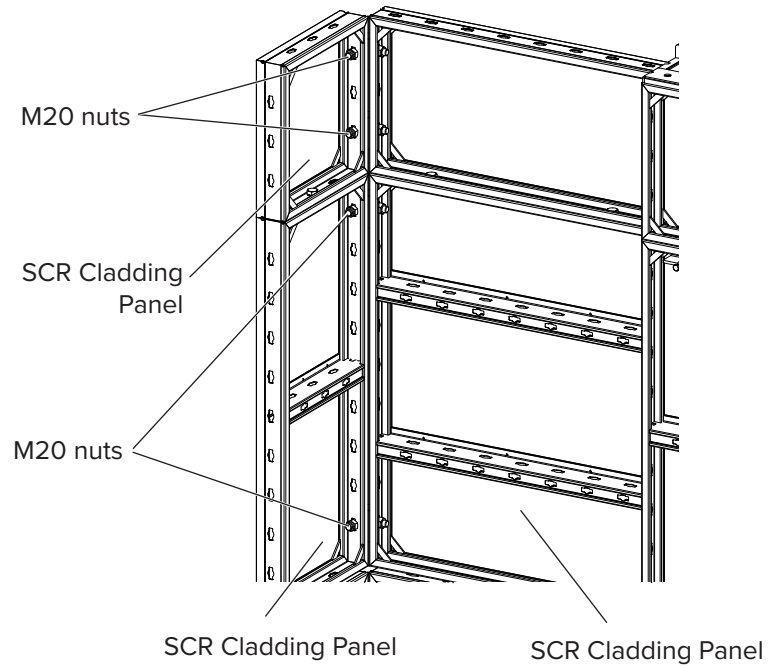
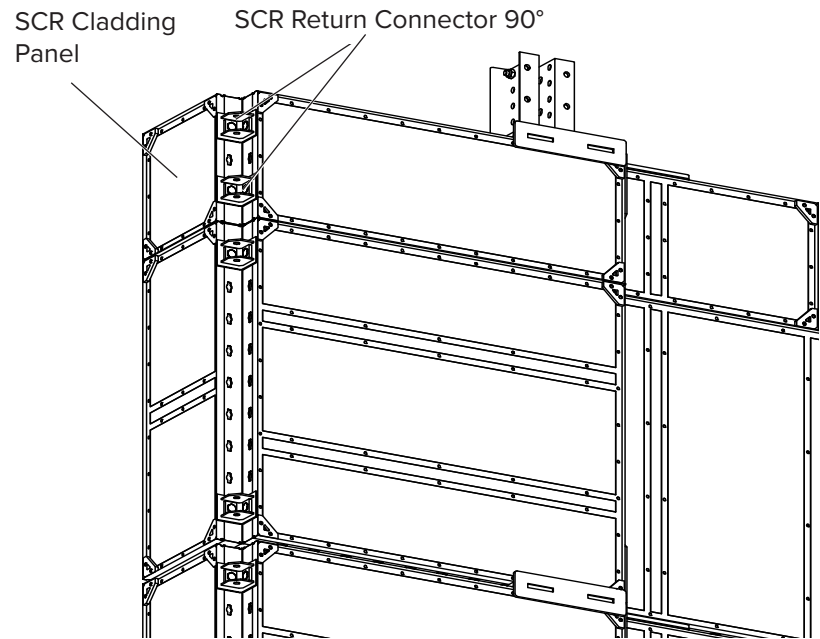


5.4.11 SCR Return Connector 90°

The SCR Return Connector 90° (code:611575) allows 2no. cladding panels to be attached to each other at right angles to create a return. The SCR Return Connector 90° is positioned on the outer side of the corner.



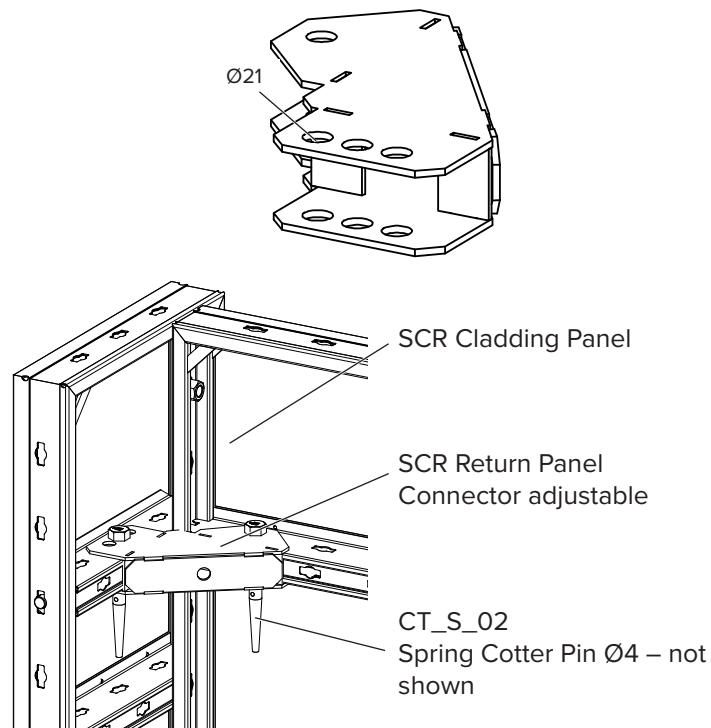
Each vertical joint of the SCR Cladding Panels must have 2no. SCR Return Connector 90° (code:611575) and the height of the return panels must match the height of the extension panels so that the holes and horizontal joints are always on the same level. The SCR Return Connector 90° should always be connected to the holes on the SCR Cladding Panels the closest to the horizontal joints.



In some cases, the SCR Panel Joint Reinforcement Plates (code:611903) may not be required. Refer to the supplied design scheme.

5.4.12 SCR Return Panel Connector adjustable

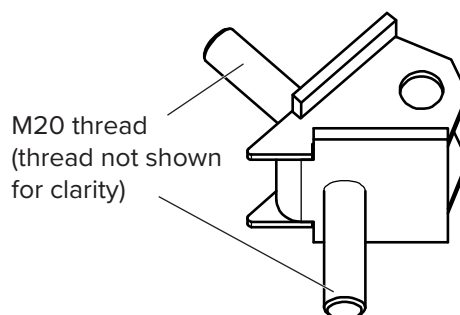
The SCR Return Panel Connector adjustable (code:611620) allows to attach two cladding panels at right angles to create a return. The SCR Return Panel Connector adjustable is positioned on the inner side of the corner and attached to the inner profiles of the cladding panels. The SCR Return Panel Connector adjustable allows for the return panel to extend beyond the front facing panels (fly-past). The bolting positions may vary depending on the type of SCR Cladding Panels used.

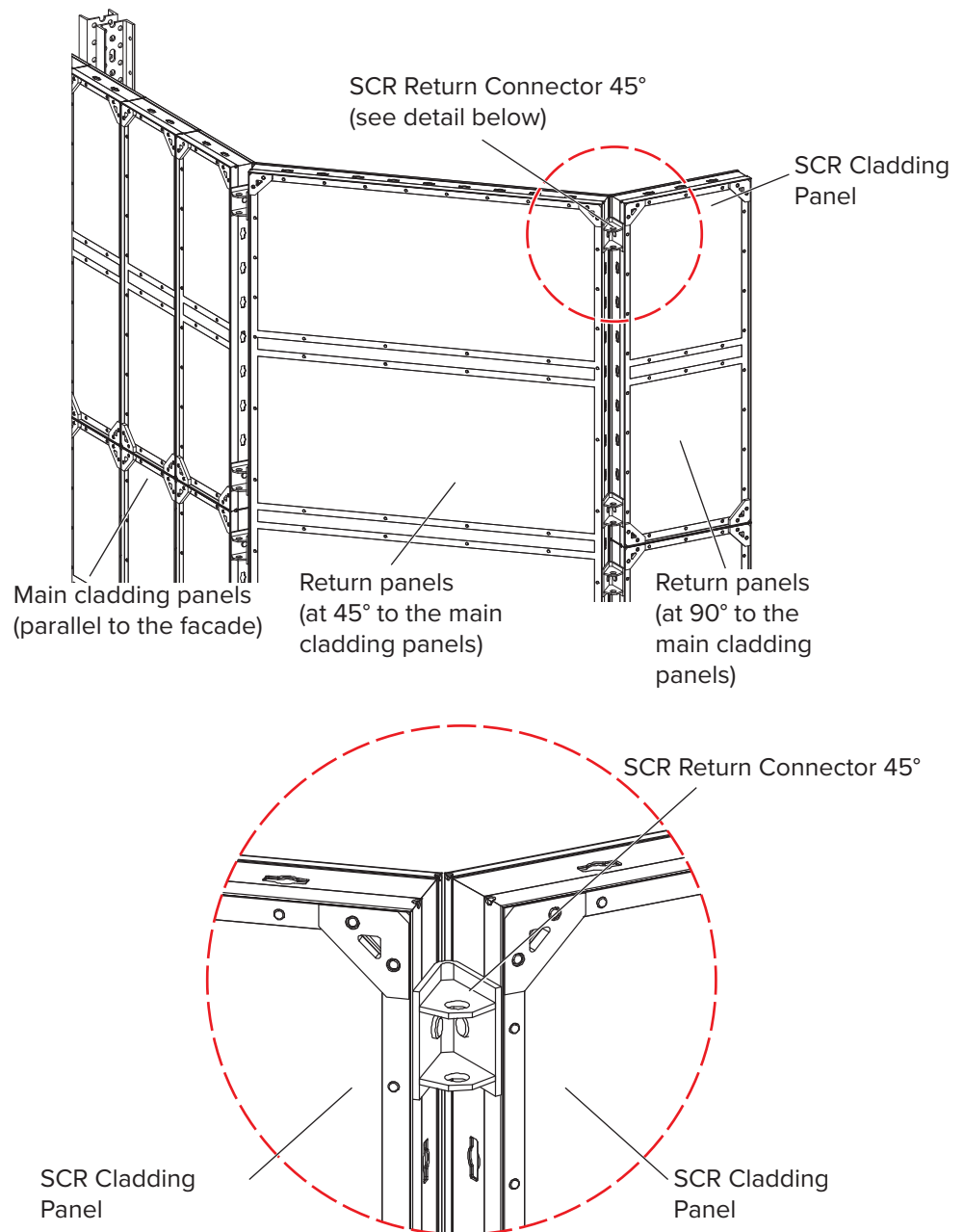


An internal corner brace, the SCR Return Panel Brace (code:612245), can also be attached to the SCR Return Panel Connector adjustable. See page 83.

5.4.13 SCR Return Connector 45°

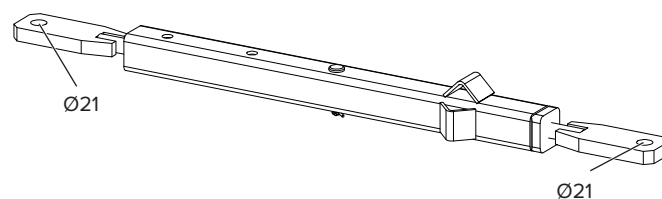
The SCR Return Connector 45° (code:611615) is used in conjunction with SCR Panel Joint Reinforcement Plates (code:611903) unless specified otherwise, to attach SCR Cladding Panels to each other at a 45° angle. This component can be used to create double return setups.



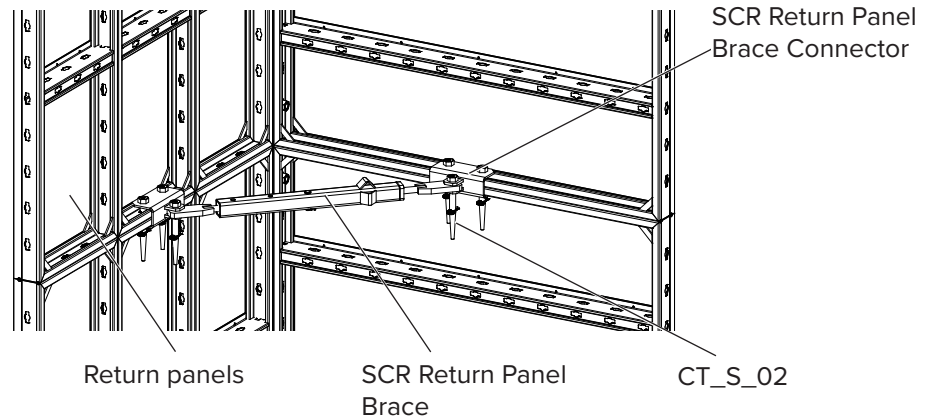


5.4.14 SCR Return Panel Brace

Used in conjunction with the SCR Return Panel Brace Connector (code:612240) to provide additional bracing to the return panels.



The SCR Return Panel Brace is attached to the SCR Return Panel Brace Connector using the G2-CT_S_02 connection type.



5.4.15 SCR Return Panel Brace Connector

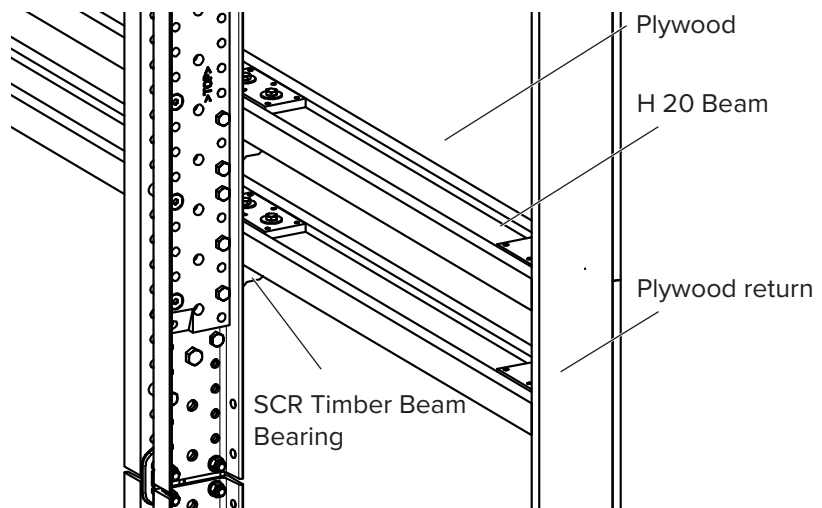
Used in conjunction with the SCR Return Panel Brace (code:612245) to brace the return panels in fixed width units, see above.

5.4.16 H 20 Beam

H 20 Beams, or laminated timber beams 200x80 mm, with plywood or corrugated sheets screwed into them can be used to form the cladding of the SAFESCREEN G2 units. The H 20 Beams are attached to the IK Walers using the SCR Timber Beam Bearing (code:611250), see page 84.

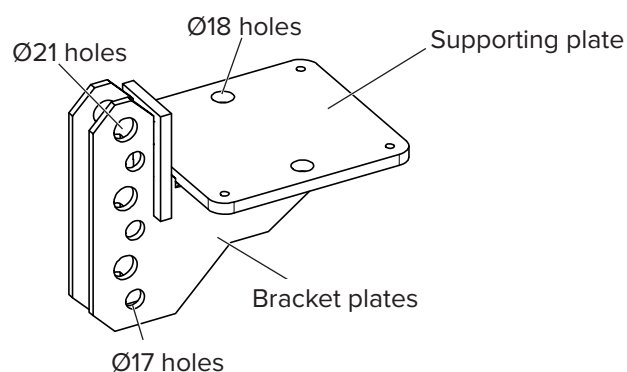


For more information regarding the layout of the H 20 Beam for cladding, refer to the supplied design scheme.



5.4.17 SCR Timber Beam Bearing

The SCR Timber Beam Bearing (code:611250) is used to attach the H 20 Beams or squared timber beams, that are used as cladding on the SAFESCREEN G2 unit.



It is typically fixed to the IK Waler M using:

- 2no. CT_M20_07, or
- 2no. CT_S_02

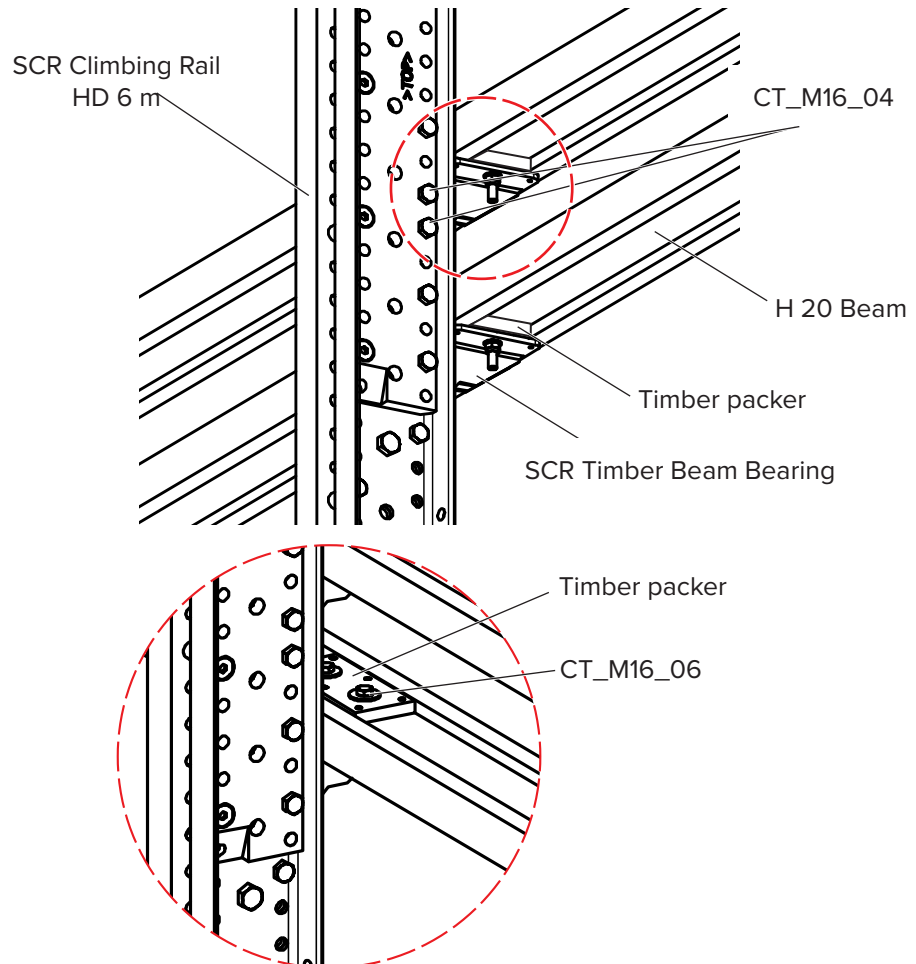
and to the IK Waler L using:

- 2no. CT_M16_04, or
- 2no. CT_S_01.

To fix the SCR Timber Beam Bearing to the H 20 Beams, timber packers are used with 2no. CT_M16_06 connection type.



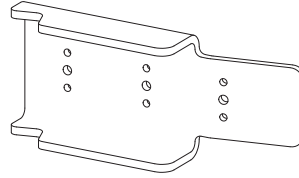
Each H 20 Beam must connect to both rails using a SCR Timber Beam Bearing (code:611250) per connection.



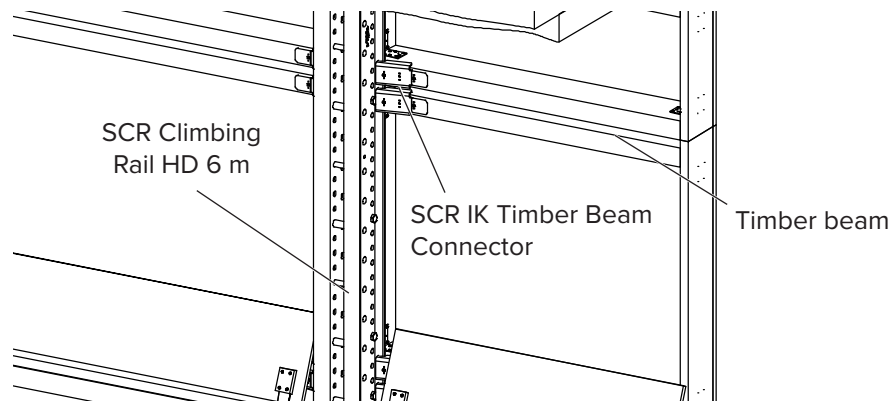
For more information regarding the required fasteners, refer to the supplied design scheme.

5.4.18 SCR IK Timber Beam Connector

An alternative to using the SCR Timber Beam Bearing (code:611250) is to use the SCR IK Timber Beam Connector (code:611401). The SCR IK Timber Beam Connector must be used in pairs (on both sides of the connection of each timber beam with an IK Waler).



The SCR IK Timber Beam Connector can be attached to the timber beams using screws specified in the supplied design scheme.



Always use in pairs. Each H 20 Beam must connect to both rails using 2no. SCR IK Timber Beam Connector (code:611401) per connection.

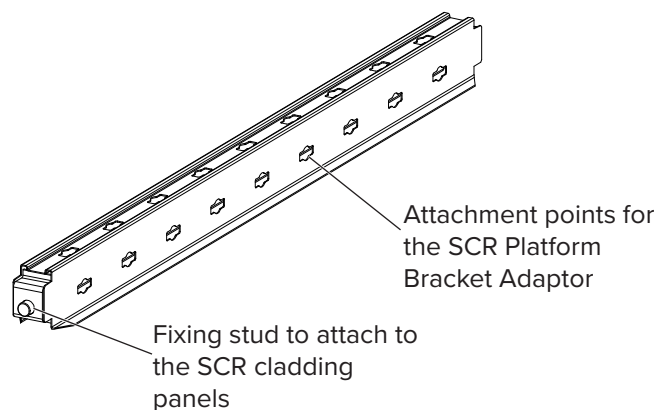
The SCR IK Timber Beam Connector does not take vertical loads so the bottom H 20 Beam must be supported using the SCR Timber Beam Bearing, see page 79.

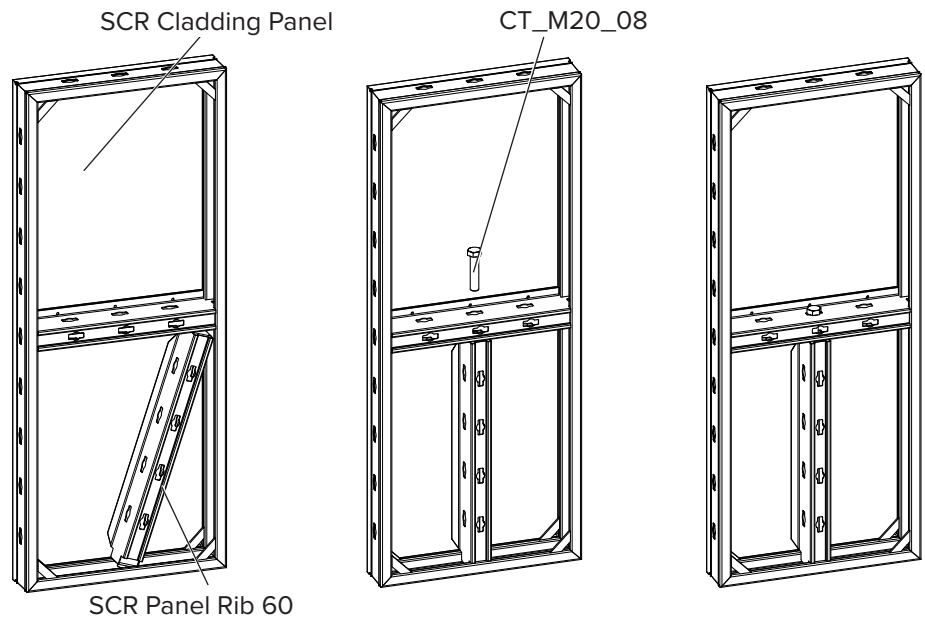
5.5 Platforms

5.5.1 SCR Panel Rib

Used with the cladding panels to stiffen the panels or to create more attachment points for the SCR Platform Bracket Adaptors.

The SCR Panel Rib is attached to the panels by slotting the stud at one end into one of the hole positions on the edge profile of the cladding panel. The SCR Panel Rib is then secured by bolting the captivated nut on the other end of the SCR Panel Rib to the opposite edge profile of the cladding panel using a CT_M20_02 connection type, or for a SCR Panel Rib 60 the rib is fixed by CT_M20_08 to the internal profile of the panel.



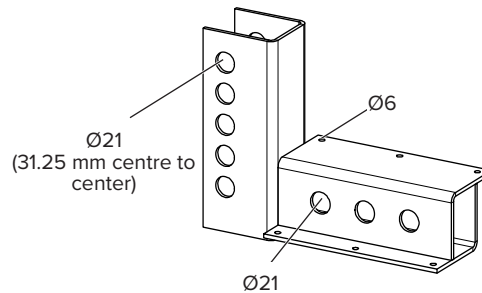


Ensure that the SCR Panel Ribs are positioned so that the slots of the SCR Panel Ribs are aligned with the slots of the SCR Cladding Panels.

See also SCR Platform Bracket Adaptor (codes:611640, 611645, or 611650, page 89), SCR Panel Platform Bracket (code:611580, page 87) and SCR Panel Platform Bracket Extension (code:612239, page 88).

5.5.2 SCR Panel Platform Bracket

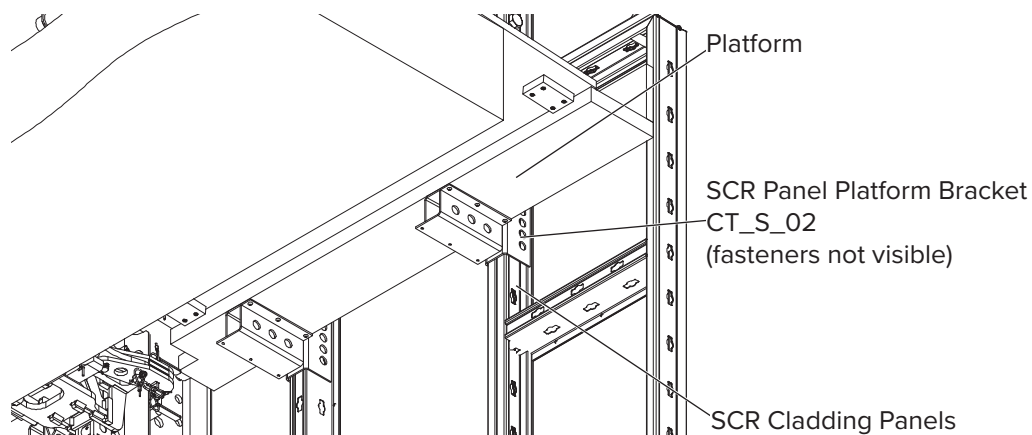
The SCR Panel Platform Bracket (code:611580) is used attached to the SCR Cladding Panels to provide support for a platform.



It is typically fixed to a cladding panel, an additional rib or to an SCR Platform Bracket Adaptor using:

- 2no. CT_M20_07, or
- 2no. CT_S_02

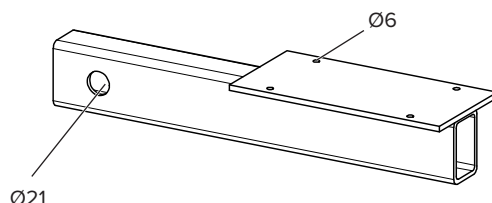
The platform is secured to the SCR Panel Platform Bracket using the CT_WC_02 connection type or as specified by the supplied design scheme.



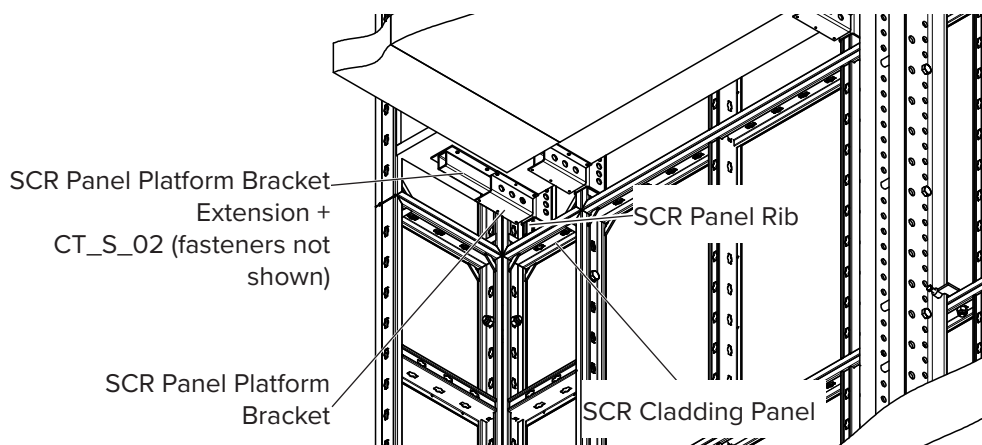
When the SCR Panel Platform Bracket cannot be attached to the profile of a SCR Cladding Panel, a SCR Panel Rib (see page 86) can be used to provide additional support points. In SAFESCREEN G2 units with extendable widths an additional SCR Platform Bracket Adaptor (see page 89) to the SCR Panel Rib is required if a SCR Panel Platform Bracket is to be installed in the extendable panels.

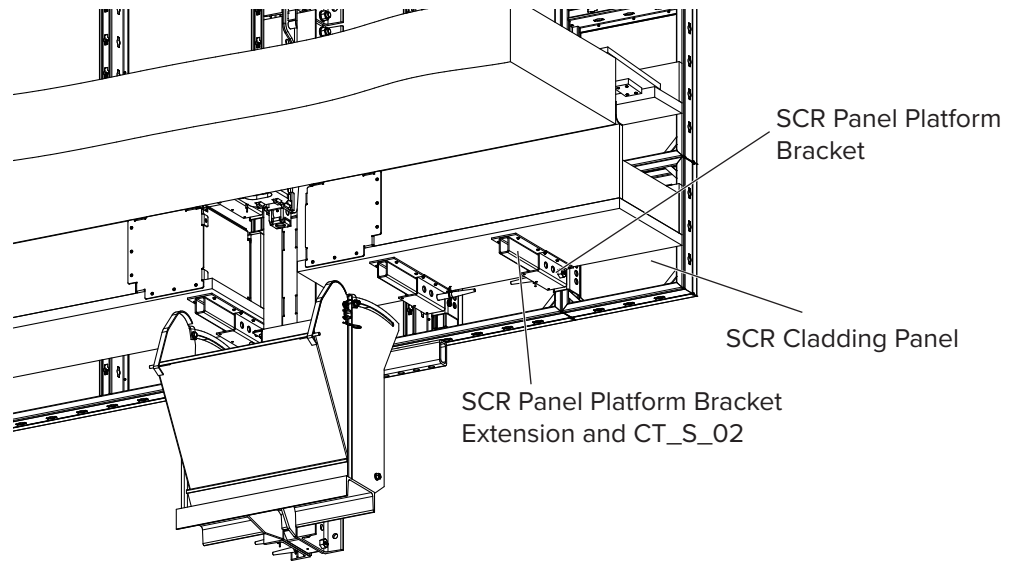
5.5.3 SCR Panel Platform Bracket Extension

The SCR Panel Platform Bracket Extension (code:612239) is used in conjunction with the SCR Panel Platform Bracket (code:611580) to extend the support for a platform. The SCR Panel Platform Bracket Extension is attached to the SCR Panel Platform Bracket using the CT_S_02 connection type or alternatively using the CT_M20_07 connection type.



The platform is secured to the SCR Panel Platform Bracket Extension using the CT_WC_02 connection type or as specified by the supplied design scheme.

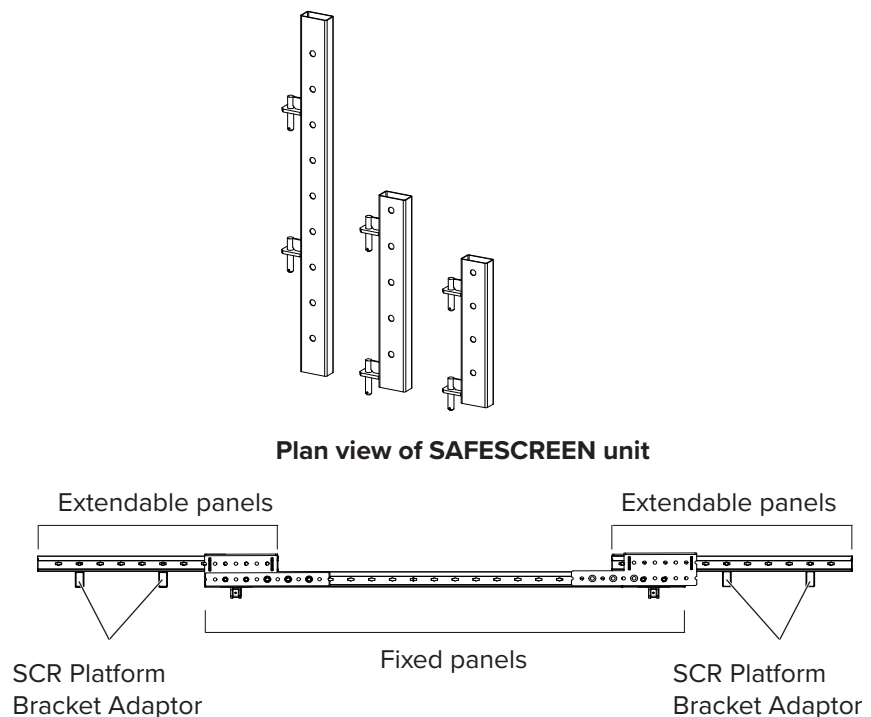




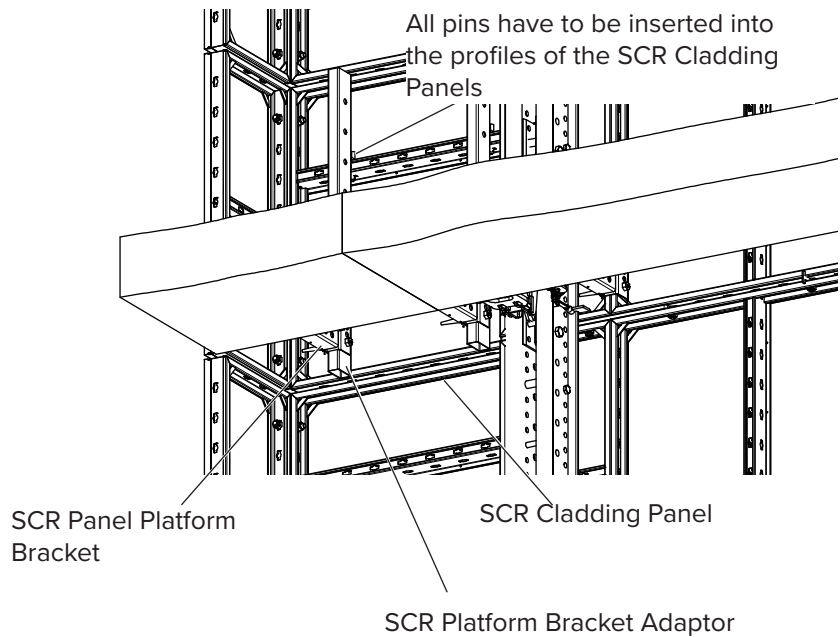
See also SCR Panel Rib (page 86), SCR Platform Bracket Adaptor (page 89) and SCR Panel Platform Bracket (page 87).

5.5.4 SCR Platform Bracket Adaptor

The SCR Platform Bracket Adaptors are typically used in extendable width SAFESCREEN G2 units. Due to the recess caused by the extendable panels, the SCR Platform Bracket Adaptors are used attached to the profiles of the SCR Cladding Panels in the extendable area, to make the SCR Panel Platform Bracket (code:611580) used in that area flush with the rest of the unit.

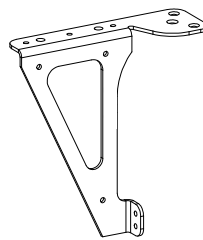


The SCR Platform Bracket Adaptors are attached by inserting the pins into the slots on the profiles of the SCR Cladding Panels and secured using spring pins.

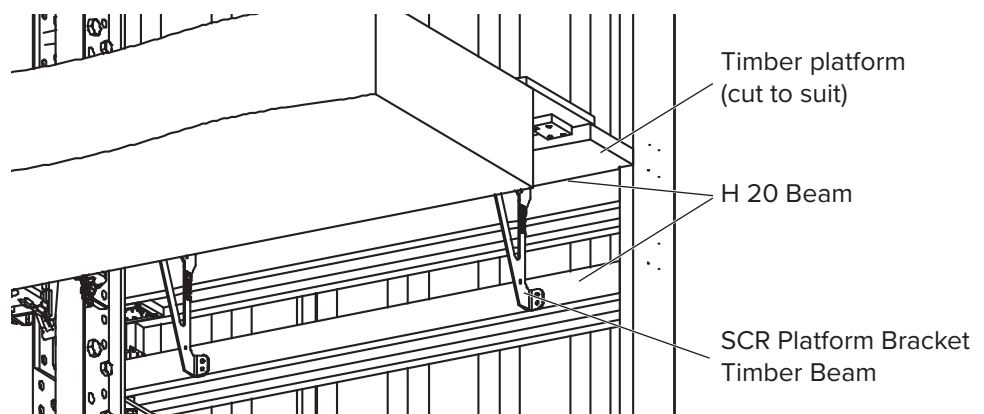


5.5.5 SCR Platform Bracket Timber Beam

The SCR Platform Bracket Timber Beam (code:611255) is used to support timber platforms on the single rail SAFESCREEN G2 units with timber cladding.



The SCR Platform Bracket Timber Beam can be attached to the timber beams at the top using 2no. CT_WC_10, or if not possible, then use the CT_M16_03 connection type. The SCR Platform Bracket Timber Beam can be fixed at the bottom using a CT_WC_10 connection type. A 60x60 mm timber packer can be used at the bottom to extend the platform towards the slab edge.



For more information regarding the position and quantity of the SCR Platform Bracket Timber Beam (code:611255), refer to the supplied design scheme.

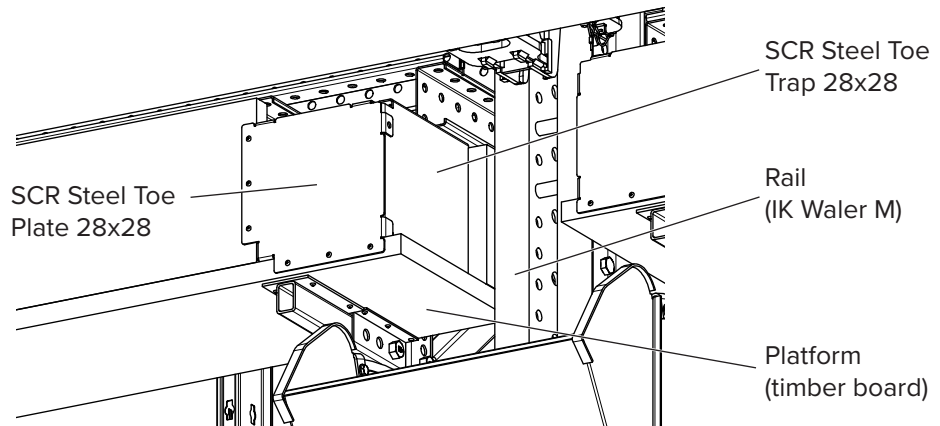
5.5.6 SCR Platform Bracket Timber Beam Long

The SCR Platform Bracket Timber Beam Long (code:611535) is used in a similar manner as the SCR Platform Bracket Timber Beam (code:611255).

5.5.7 SCR Steel Toe Plate 28x28

The SCR Steel Toe Plate 28x28 (code:611626) is used to form the corner of the toe board of the bottom safety platform at level L-2 of the SAFESCREEN G2 unit. It is secured to the timber using the CT_WC_01 connection type.

It must be used in conjunction with the SCR Steel Toe Trap 28x28 (code:611675).



5.5.8 SCR Steel Toe Trap 28x28

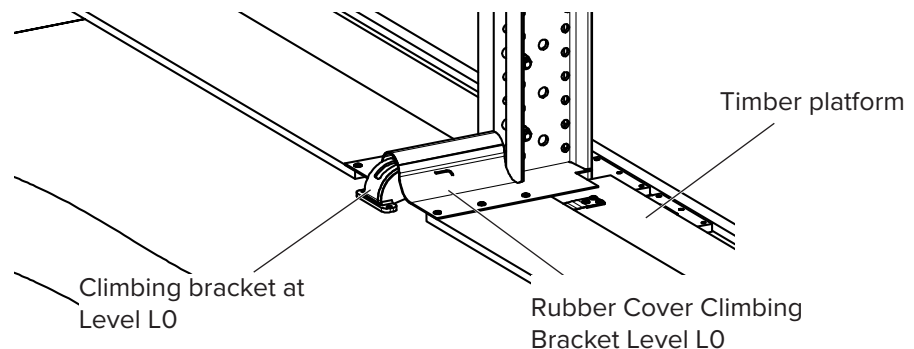
The SCR Steel Toe Trap 28x28 (code:611675) is used to form the corner of the toe board of the bottom safety platform at level L-2 of the SAFESCREEN G2 unit.

It must be used in conjunction with the SCR Steel Toe Plate 28x28 (code:611626), see page 91.

5.6 Rubber Covers

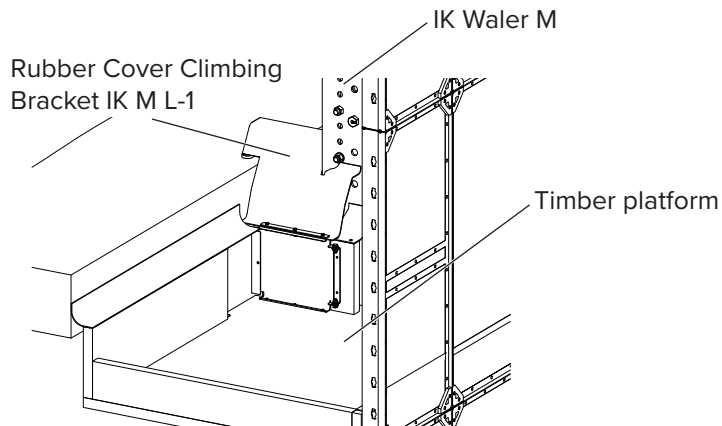
5.6.1 Rubber Cover Climbing Bracket L0

Used in pairs to cover the climbing bracket at Level L0, see page 94. Fixed to the foldable timber traps using the CT_WC_01 connection type.



5.6.2 Rubber Cover Climbing Bracket IK M L-1

Used in pairs to cover the climbing bracket at Level L-1, see page 94. Fixed to the retractable timber platform using the CT_WC_01 connection type.



5.6.3 Rubber Cover IK M L1

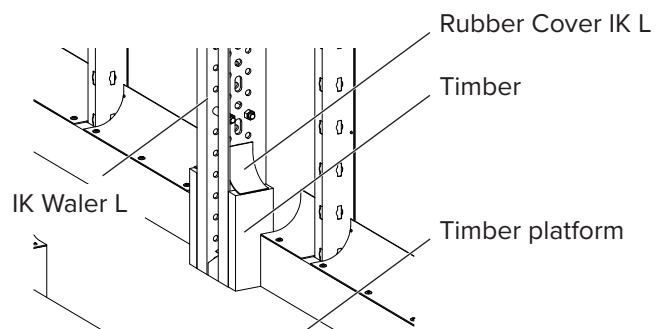
Used in pairs to seal the opening around both sides of the IK Waler M. Fixed to the platform deck or the toe board using CT_WC_01.

5.6.4 Rubber Cover Climbing Bracket IK L L-2

Used in pairs to cover the climbing bracket at level L-2, see page 94. Fixed to the toebord plate using the CT_WC_01 connection type.

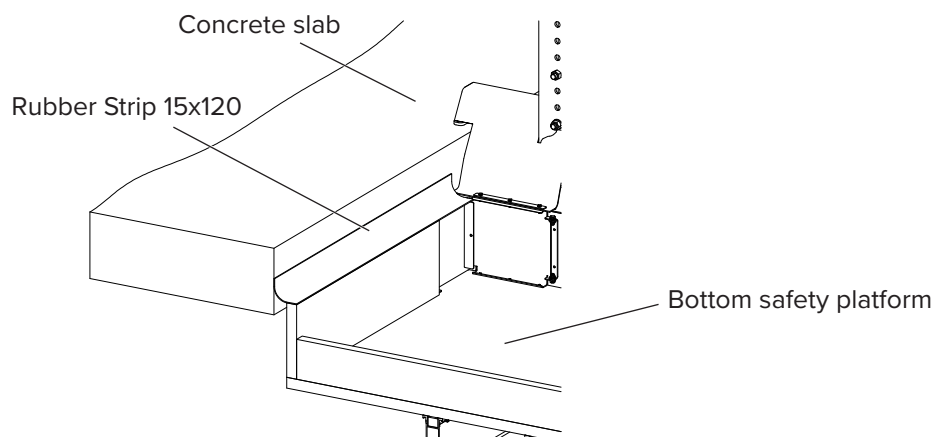
5.6.5 Rubber Cover IK L

Used in pairs to seal the opening around both sides of the IK Waler L. Fixed to the timber platform using nails.



5.6.6 Rubber Strip 15x120

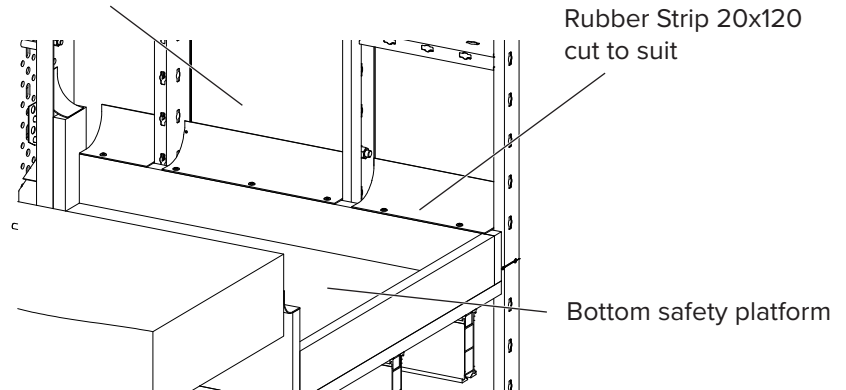
Used to create a seal between the lowest platform and a concrete slab. Fixed to the timber platform using the CT_WC_01 connection type.



5.6.7 Rubber Strip 20x120

Used to create a seal between the lowest platform and the cladding panels. Fixed to the timber platform using nails.

SCR Cladding Panel



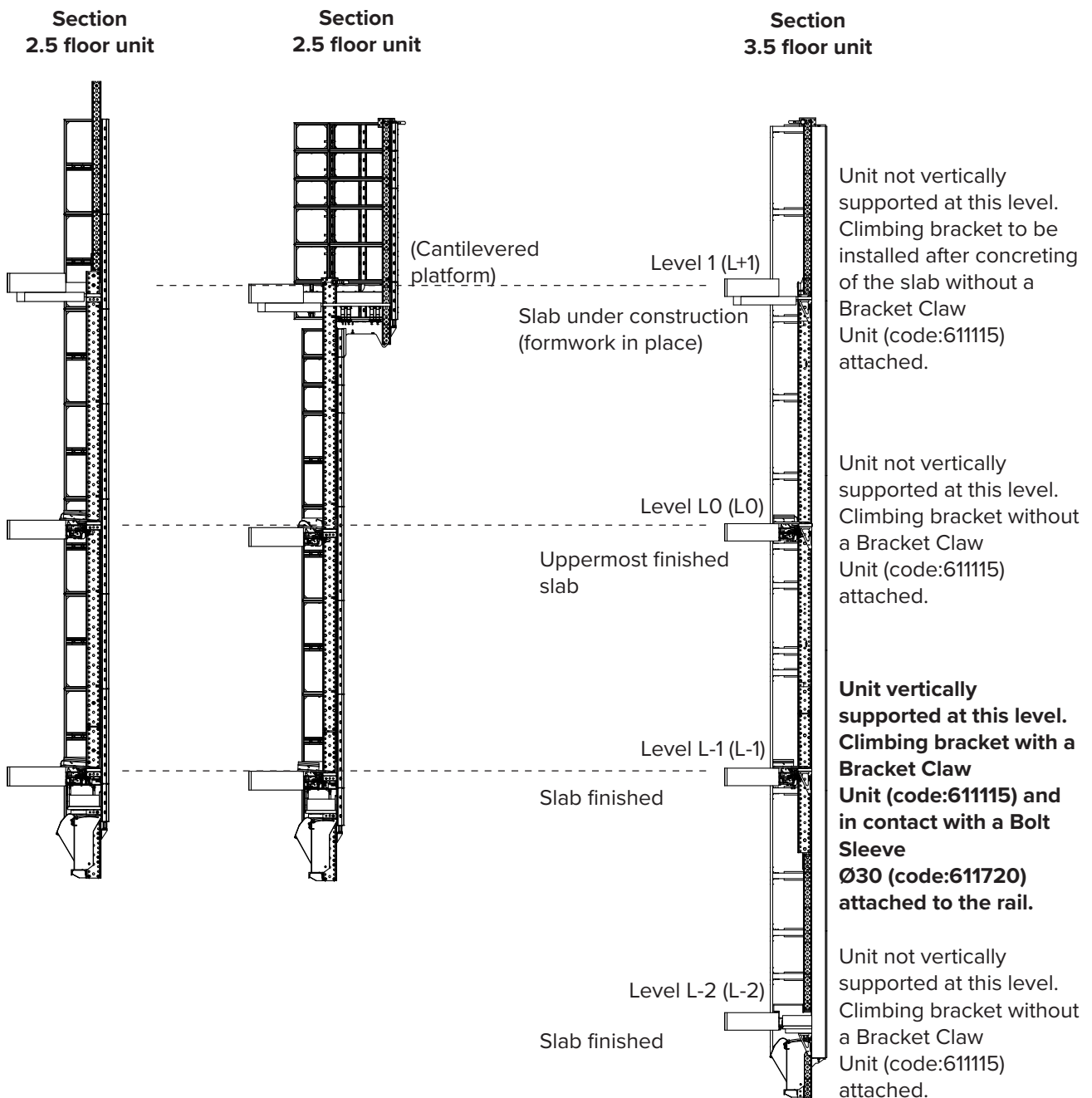
6 Levels and naming conventions

6.1 SAFESCREEN G2 unit levels

Level L0 of the SAFESCREEN G2 unit is the level of the uppermost finished concrete slab and is the position at which the unit is supported horizontally only.

Level L-1 is the level at which the unit is typically supported both vertically and horizontally.

Note that the units shown below are in their "working" position. During climbing operations, some climbing brackets will have a Bracket Claw Unit (code:611115) added to them.

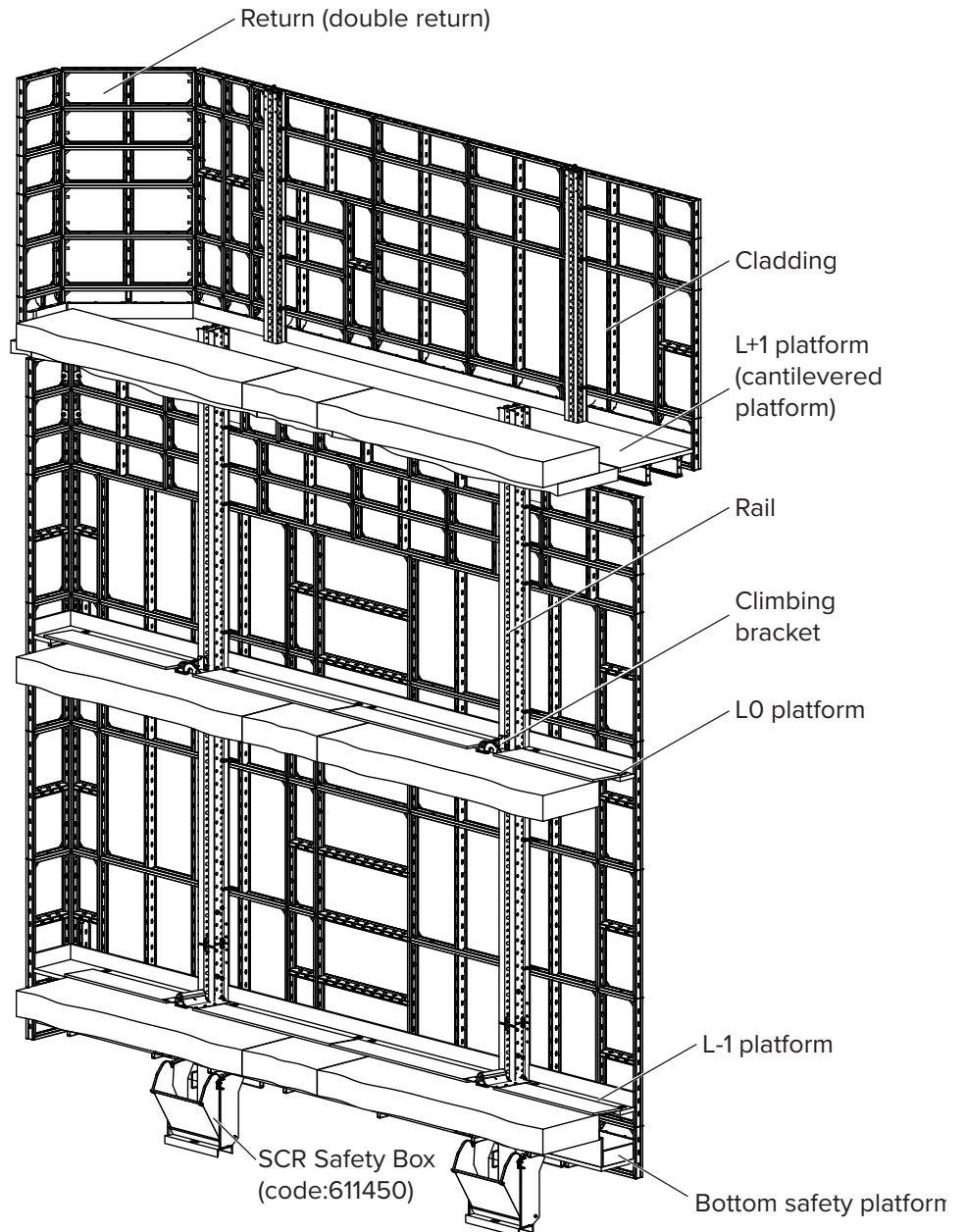


The 2.5 floor SAFESCREEN G2 units cover 2 floors of the concrete structure with an overlap of typically 2.00 m over the top slab.

The 3.5 floor SAFESCREEN G2 units cover 3 floors of the concrete structure with an overlap of typically 2.00 m over the top slab.

6.2 Naming convention

The naming used for the different parts of the SAFESCREEN G2 unit is shown below. The name of some parts may vary depending on the levels of the unit. For reference, the typical section for the configuration shown can be seen in page 94.

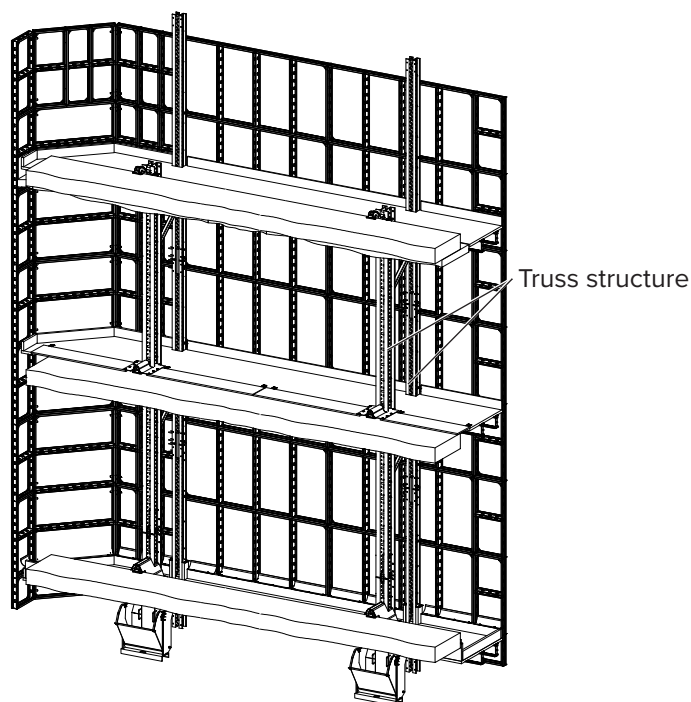
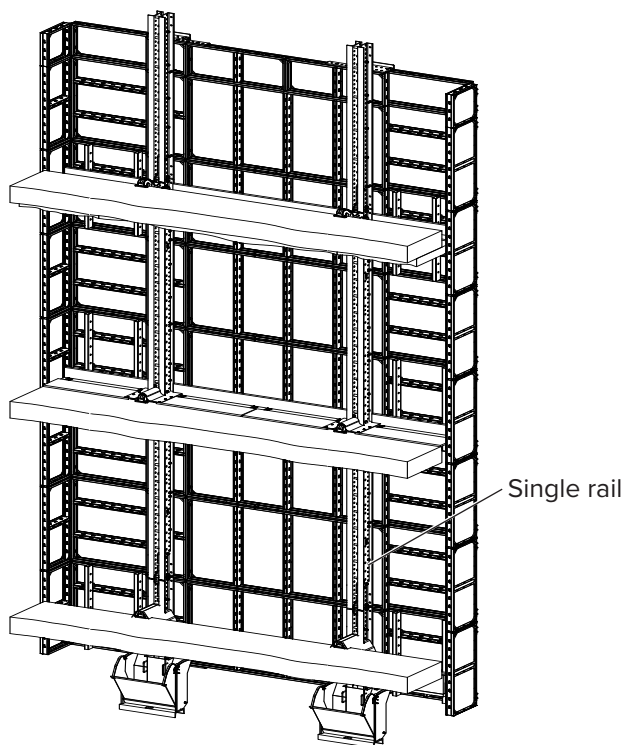


7 Typical configurations

The typical section of a SAFESCREEN G2 unit can vary. Mostly the SAFESCREEN G2 units can be characterised by which type of vertical structure is used and by the type of cladding. Both can vary depending on the job requirements.

7.1 Rails

SAFESCREEN G2 units can be built using either a single rail or a truss structure.



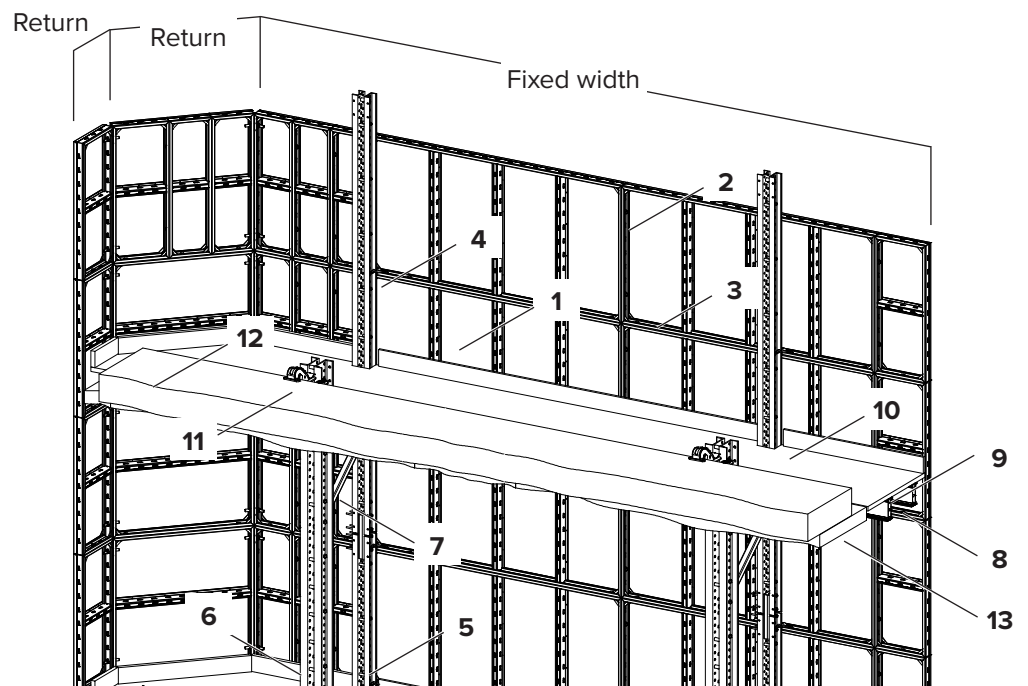
7.2 Cladding

The cladding of the SAFESCREEN G2 units provides not only edge protection but also protection against environmental conditions. The available options are shown in this chapter. The use of the different types shown might be limited by project specific circumstances such as wind speed and floor height. All shown setups must be subject to statical checking prior to use.

7.2.1 Cladding panels

The SCR Cladding Panels are used to provide a robust option for cladding. The SCR Cladding Panels have standard sizes and are thus able to be combined in various ways to form the cladding area.

Fixed width



- 1 SCR Cladding Panels
- 2 Connections as specified by the design scheme
- 3 No connection of the horizontal joints of the cladding panels unless specified otherwise by the design scheme
- 4 SCR IK Cladding Panel Flange Connector L (code:611545) or
SCR IK Cladding Panel Web Connector L (code:612216)
- 5 IK Waler L (may vary depending on site requirements)
- 6 IK Waler M
- 7 SCF 60 Diagonal 75x75 (code:612130)
- 8 DU-AL beams or H 20 Beams
- 9 Plywood as decking
- 10 Timber as toe board.
- 11 SCR Slab Edge Bracket (code:611170)
- 12 Concrete slab
- 13 Slab formwork

Also included in this unit but not visible is the SCR Platform Beam 0.75 m Rigid (code:612263), see page 69.

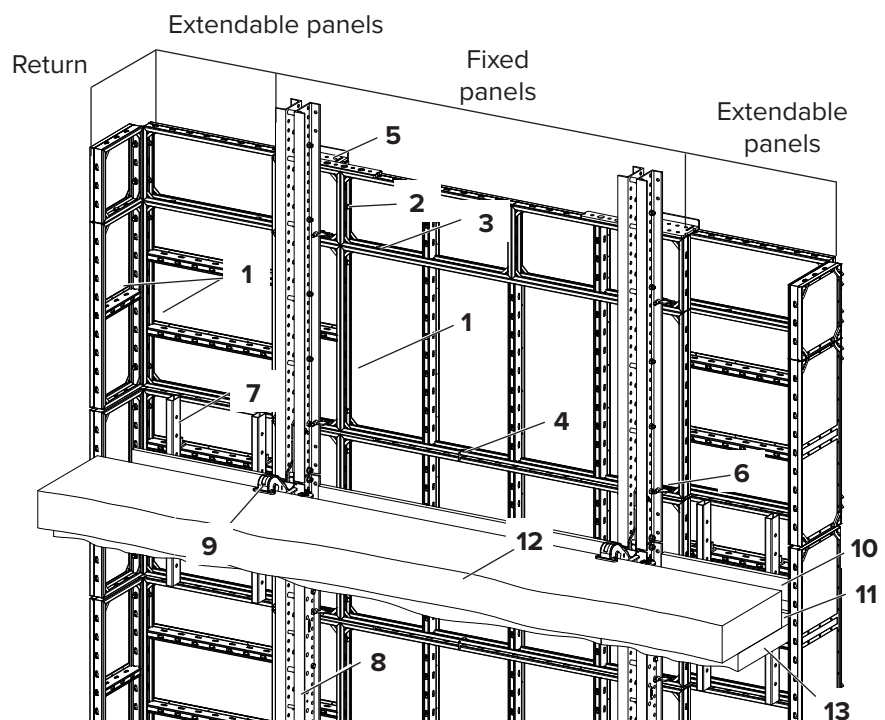
Please note that the panel connectors cannot take any vertical loads that run parallel to the IK Walers. Therefore, all vertical loads have to be taken by the SCR Cladding Panel Bearing (code:612056) on the bottom of the cladding.

The SAFESCREEN G2 unit above has a double return configuration made possible by using the SCR Return Connector 45° (code:611615), see page 80, which is also not visible.

Extendable width

SAFESCREEN G2 units can have retractable sides referred to as extendable width. This allows for large units to be retracted to a width compliant with the maximum allowable transport width, so that they can be partially pre-assembled and transported to site.

Only the SCR Cladding Panels can be used to form an extendable width SAFESCREEN G2 unit.



- 1 SCR Cladding Panels
- 2 ISO 4017 M20x40 and ISO 10511 M20 Hex. Nut
- 3 IK Pin Ø20 (code:608820) and Spring Cotter Pin Ø4 (code:173776)
- 4 SCR Cladding Panel T-Spacer (code:611548)
- 5 SCR Extension Panel Bearing (code:611962)
- 6 SCR IK Flange Cladding Panel Connector M (code:611540) or
SCR IK Cladding Panel Web Connector M (code:611550)
- 7 SCR Platform Bracket Adaptor
- 8 IK Waler M
- 9 SCR Slab Edge Bracket (code:611170)
- 10 Timber as toe board
- 11 Plywood as decking
- 12 Concrete slab
- 13 Slab formwork

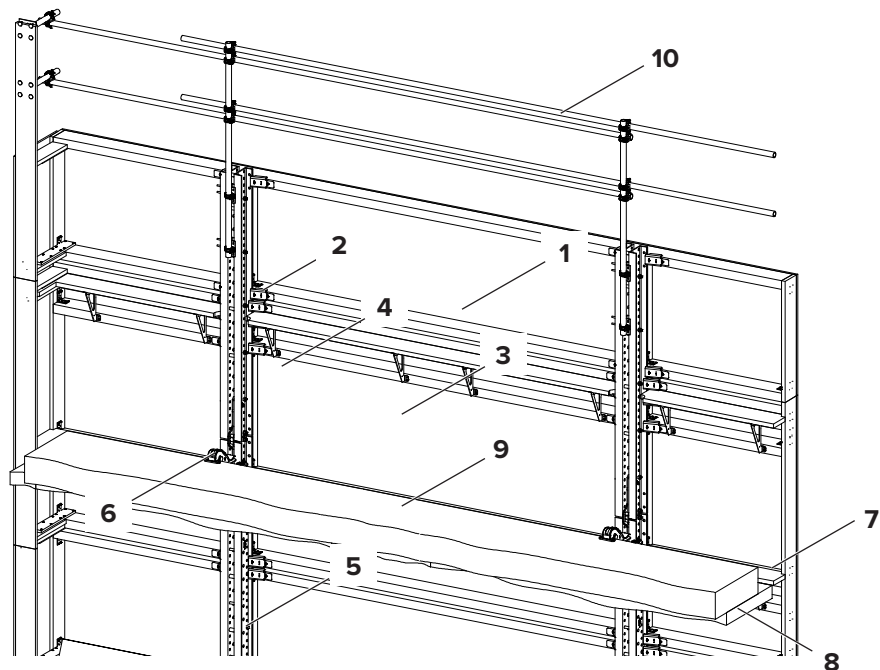
Also included in this unit but not visible are the SCR Extension Panel

Stoppers (code:611966), see page 73. The SAFESCREEN G2 unit above has a single return configuration made possible by using the SCR Return Connector 90° (code:611575), see page 75, which is also not visible.

7.2.2 Timber panels

The option of having pre-assembled timber panels with an infill sheet of plywood is also possible. The timber panels and rails are pre-assembled and delivered to site at which point the SAFESCREEN G2 unit is assembled.

The edge protection shown at the top is only used temporarily on exceptionally high floors and is assembled after the SAFESCREEN G2 unit is attached to the existing concrete structure.



- 1 Timber panels
- 2 SCR IK Timber Beam Connector (code:611401)
- 3 SCR Platform Bracket Timber Beam (code:611255)
- 4 Plywood as decking
- 5 IK Waler M
- 6 SCR Slab Edge Bracket (code:611170)
- 7 Plywood as decking
- 8 Table formwork
- 9 Concrete slab
- 10 Tube & fittings as additional edge protection

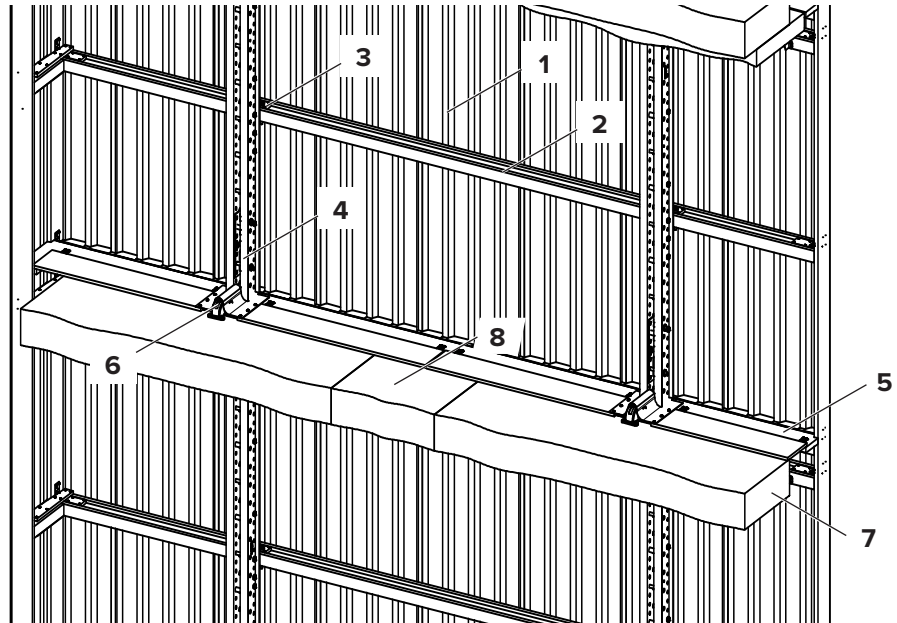
Also included in this unit but not visible are the SCR Timber Beam Bearings (code:611250), see page 84.

Please note that the panel connectors cannot take any vertical loads that run parallel to the IK Walers. Therefore, all vertical loads have to be taken by the SCR IK Timber Beam Bearing on the bottom of the cladding. All panels have to be assembled in a way that they are able to transfer these loads.

7.2.3 Timber beams and corrugated sheet

The other cladding options are the combination of timber beams with plywood or timber beams with corrugated sheet. Due to the fact that both options are similar with the exception of the infill sheet, only the option of timber beams with corrugated sheet is shown here.

Please note that shown below is a typical configuration for illustration purposes only. The SAFESCREEN G2 units may have more beams due to the specific site requirements.



- 1 Corrugated sheet
- 2 Timber beams
- 3 SCR Timber Beam Bearing (code:611250)
- 4 IK Waler M
- 5 Plywood as decking
- 6 SCR Slab Edge Bracket (code:611170)
- 7 Concrete slab

Also included in this unit but not visible is the SCR Platform Bracket Timber Beam (code:611255), see page 90.

7.3 Platforms

7.3.1 Platforms for single rail units

The layout of the platforms is greatly influenced by many factors. Some of them are:

- Layout of slab formwork (ensure that the SAFESCREEN G2 unit does not clash with slab formwork).
- Layout of column formwork (ensure that the SAFESCREEN G2 unit does not clash with column formwork and that the traps can be fully closed).
- Local safety considerations such as step height, edge protection requirements, etc.

In a single rail unit the platform brackets are fixed to the cladding structure, therefore the components used to build platforms for the single rail SAFESCREEN G2 units will vary depending on the type of cladding used.

The decking of these platforms is always done using timber boards and / or plywood and made to suit each unit requirement. The fixed part of the platform typically ends at the inner flange of the vertical rail. A 30 mm clearance between the platform and the outer edge of the formwork should be kept. This removes the need for the formwork to be stripped before the SAFESCREEN G2 unit can climb.

Timber cladding

- SCR Platform Bracket Timber Beam (code:611255)

SCR Cladding Panels

- SCR Panel Platform Bracket (code:611580)
- SCR Panel Platform Bracket Extension (code:612239) if required
- SCR Panel Ribs if required
- SCR Platform Bracket Adaptors for extendable width SAFESCREEN G2 units

7.3.2 Platforms for truss units

The components used to build platforms for the truss rail SAFESCREEN G2 units will vary depending on the type of platform.

The decking of these platforms is always done using timber boards / plywood and made to suit each unit requirement.

Fixed platform setup

- DU-AL DU-AL T200 Beams, T 150 beams or H 20 Beams

Folding platform setup

- HD Channel
- Extension Channel 138
- Guide Box (code:595142)
- Pivot Plate (code:595143)

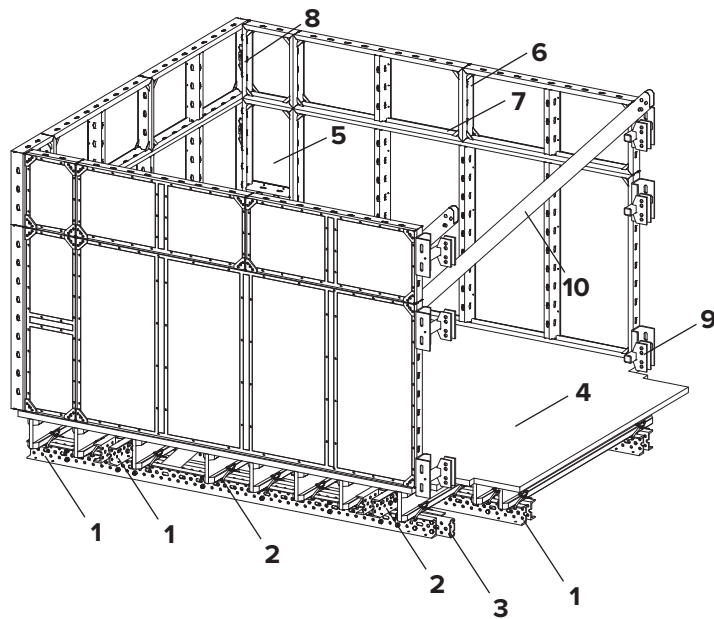
7.4 Loading platform

The construction sequence of the concrete structure requires for material to be transported between the different slab levels, especially for slabs inside the perimeter of the screens.

The main processes are:

- Rotation of formwork material from Level L-1 to L0 before erecting the slab formwork.
- Rotation of back-propping from level L-2 to level L-1.

Loading platforms are used to position materials that are to be moved to the inside of the perimeter of the SAFESCREEN G2 units. The configuration of the loading platform may vary depending on specific requirements, in particular the size of the slab formwork elements.



1 IK Waler L

2 H 20 Beam and H 20 Timber Beam Clamp (code:568048) or DU-AL Beams and DU-AL T150 MKII Anchor Washer Clamp (code:717605)

3 IK Waler Connector L 25 (code:608445)*

4 Plywood as decking (double layer – slip resistance surface)

5 SCR Cladding Panels

6 ISO 4017 M20x40 and ISO 10511 M20 Hex. Nut

7 CT_M20_03 connection type

8 SCR Inner Corner Panel Connector (code:611755)

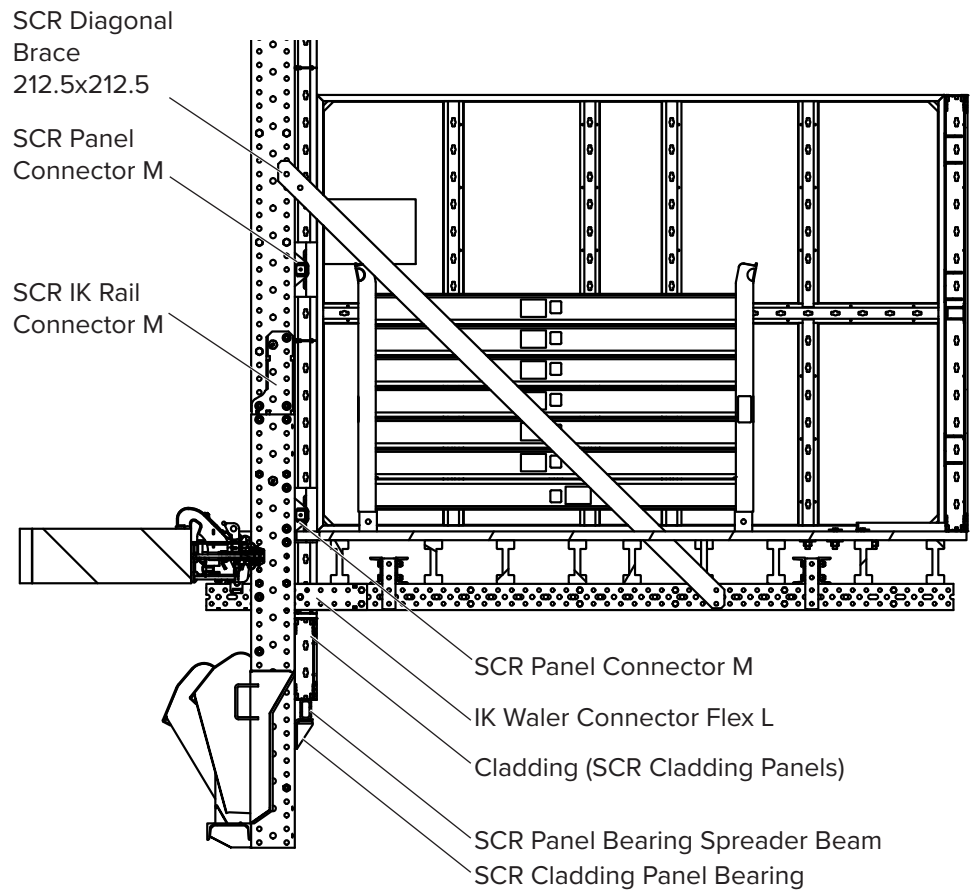
9 SCR Panel Connector M (code:611680) or SCR Panel Connector L (code:612660)

10 SCR Diagonal Brace 212.5x212.5 (code:611762)

* Note that the IK Waler Connector L 25 (code:608445) is only used to attach the loading platform to an IK Waler L. To attach a loading platform to an IK Waler M, an IK Waler Connector Flex L (code:608490) is required.

Also included in this unit but not visible is the SCF 60 Cross Connector L (code:612210), see page 136, and the SCR G2 Panel Joint Reinforcement Plate (code:611903) and the SCR Panel Deck Connection Washer (code:611902).

Seen below is a cross-section of a typical connection of a loading platform to a SAFESCREEN G2 unit. A stack of formwork panels is shown in the loading area to illustrate the functionality.



7.5 Ladder access

Ladder access solutions are available. Please contact your Hünnebeck design office.

7.6 Sealing the units

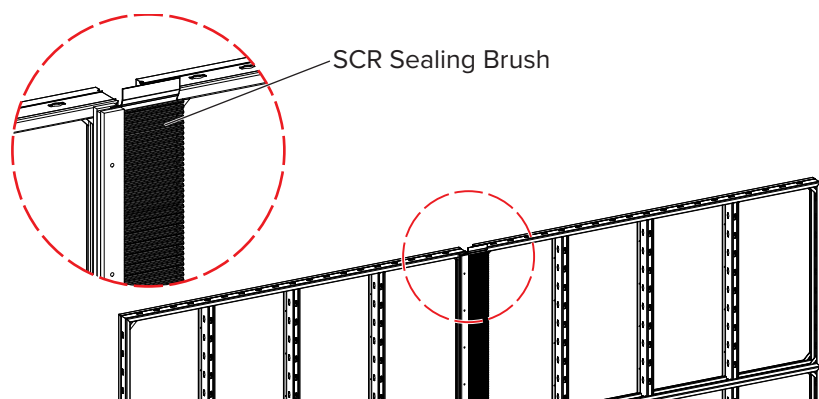
To prevent debris from falling from the SAFESCREEN G2 units the following options are available. The options shown are typical and specific site requirements may change.

7.6.1 Vertical sealing

SCR Sealing Brushes can be used to seal adjacent SAFESCREEN G2 units.



For the connection to the SAFESCREEN G2 unit, refer to the supplied design scheme specific to each job requirement.



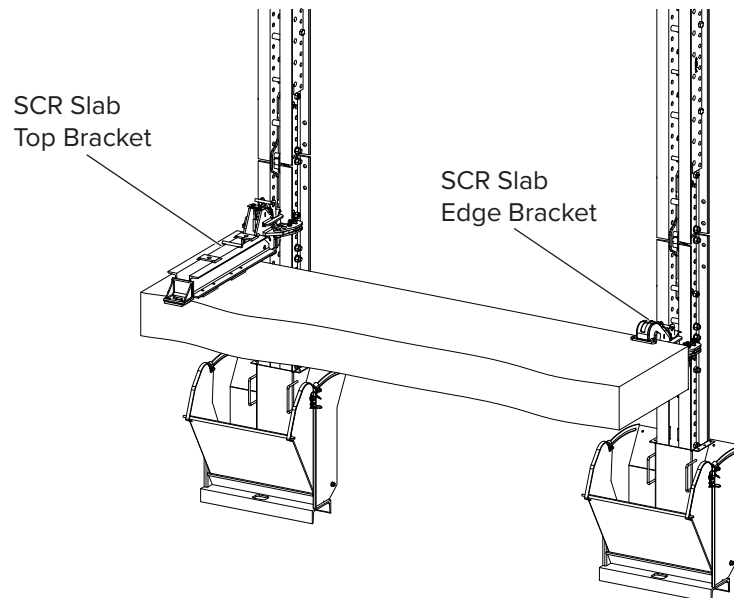
8 Typical solutions

The typical solutions shown represent typical arrangements that can be achieved using the SAFESCREEN G2 system. They may not be applicable to all situations and may not meet all job requirements. Some components may also be omitted for clarity.

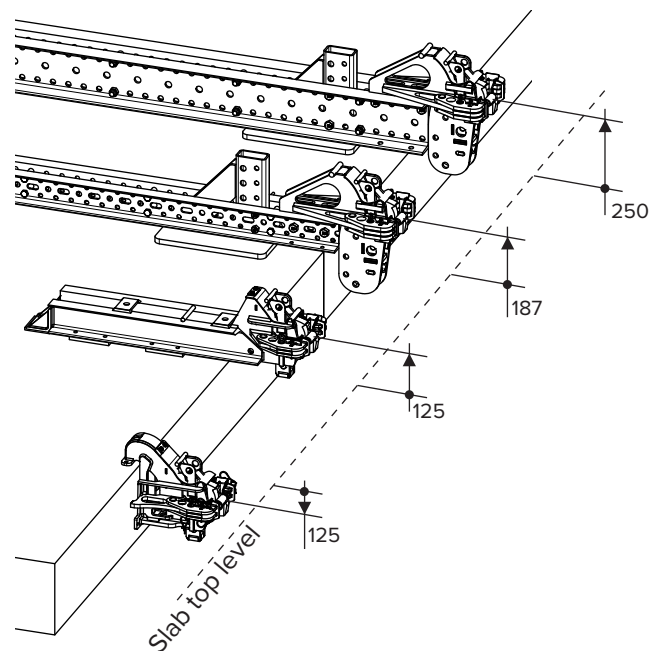
A separate statical calculation is required for each application.

8.1 Combination of SCR Slab Edge Bracket and SCR Slab Top Bracket

Due to the pitch of the bobbins it is possible to use different climbing brackets for the same SAFESCREEN G2 unit as shown below.

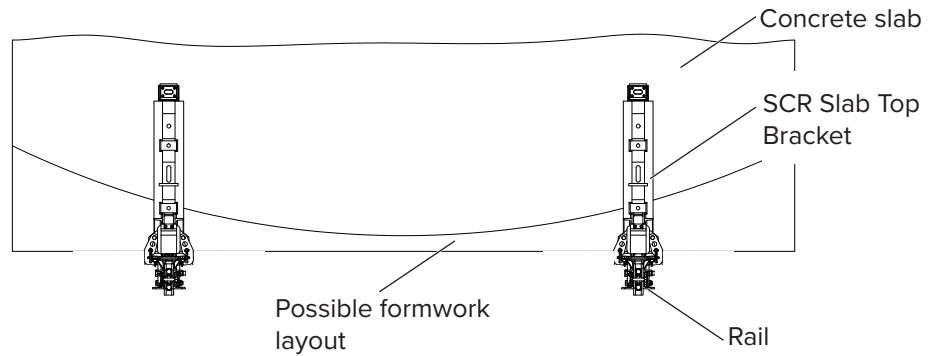


Shown below are the height differences between the different climbing brackets. Dimensions shown are distances between the centre of the support bobbin to the top of the slab (dashed line).



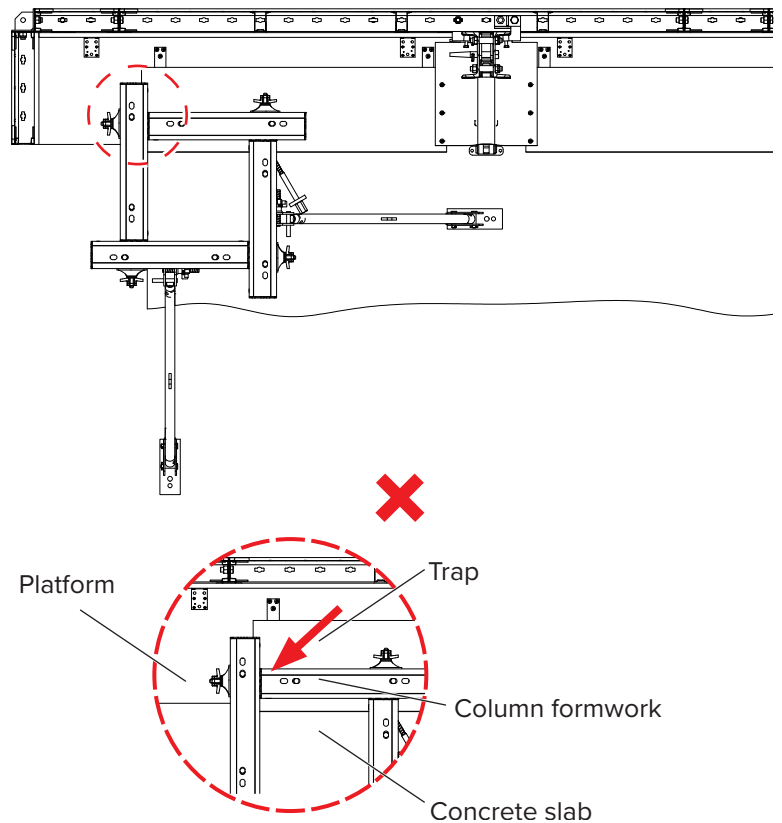
8.2 Circular slab edges

SAFESCREEN G2 units can also be used in circular slabs. Shown below is a simple example of a typical solution, however it will vary depending on specific job requirements. For more information contact your Hünnebeck design office.



8.3 Column formwork at slab edge

Care must be taken during the design stage to avoid clashes with any existing column formwork. Shown below is a situation where typical column formwork will clash with the SAFESCREEN G2 unit. These situations must be avoided.

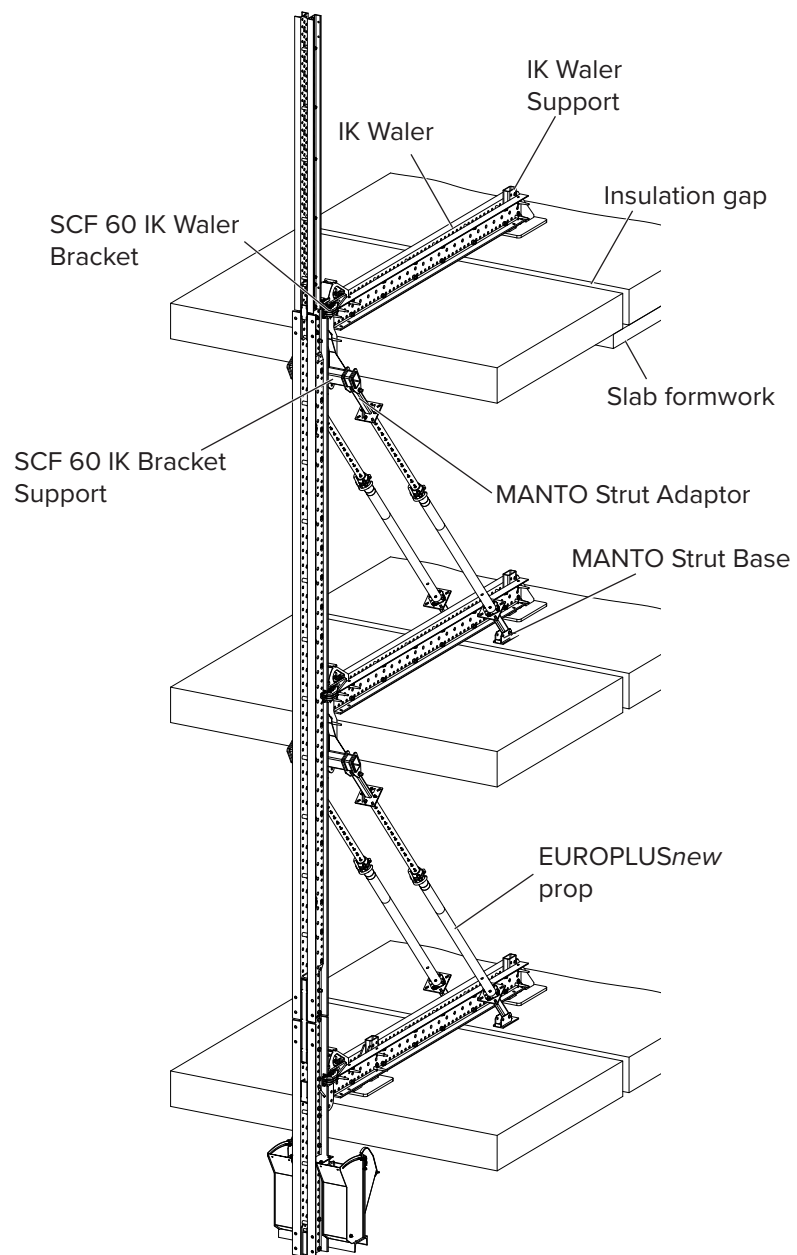


8.4 Balconies

In many buildings there are areas of the slabs that are not able to carry the loads of the SAFESCREEN G2 or where the possibilities to anchor the SAFESCREEN G2 are limited due to the design of the structure. These may be (but are not limited to):

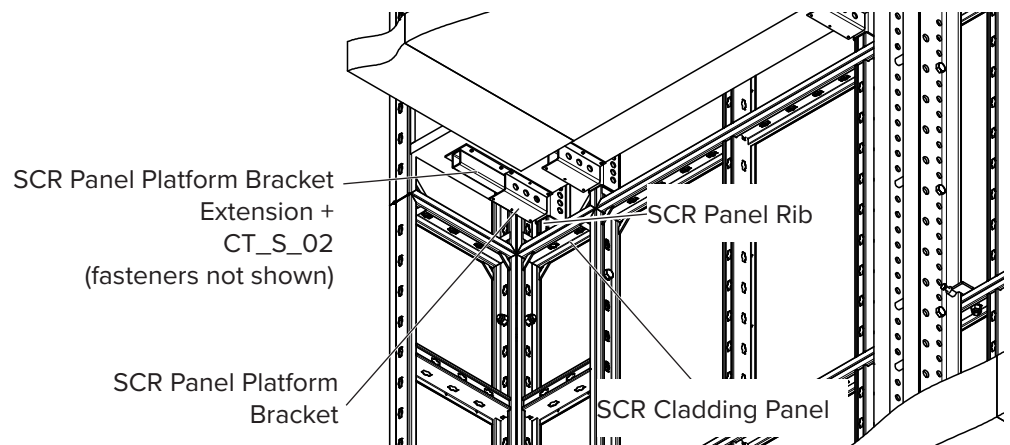
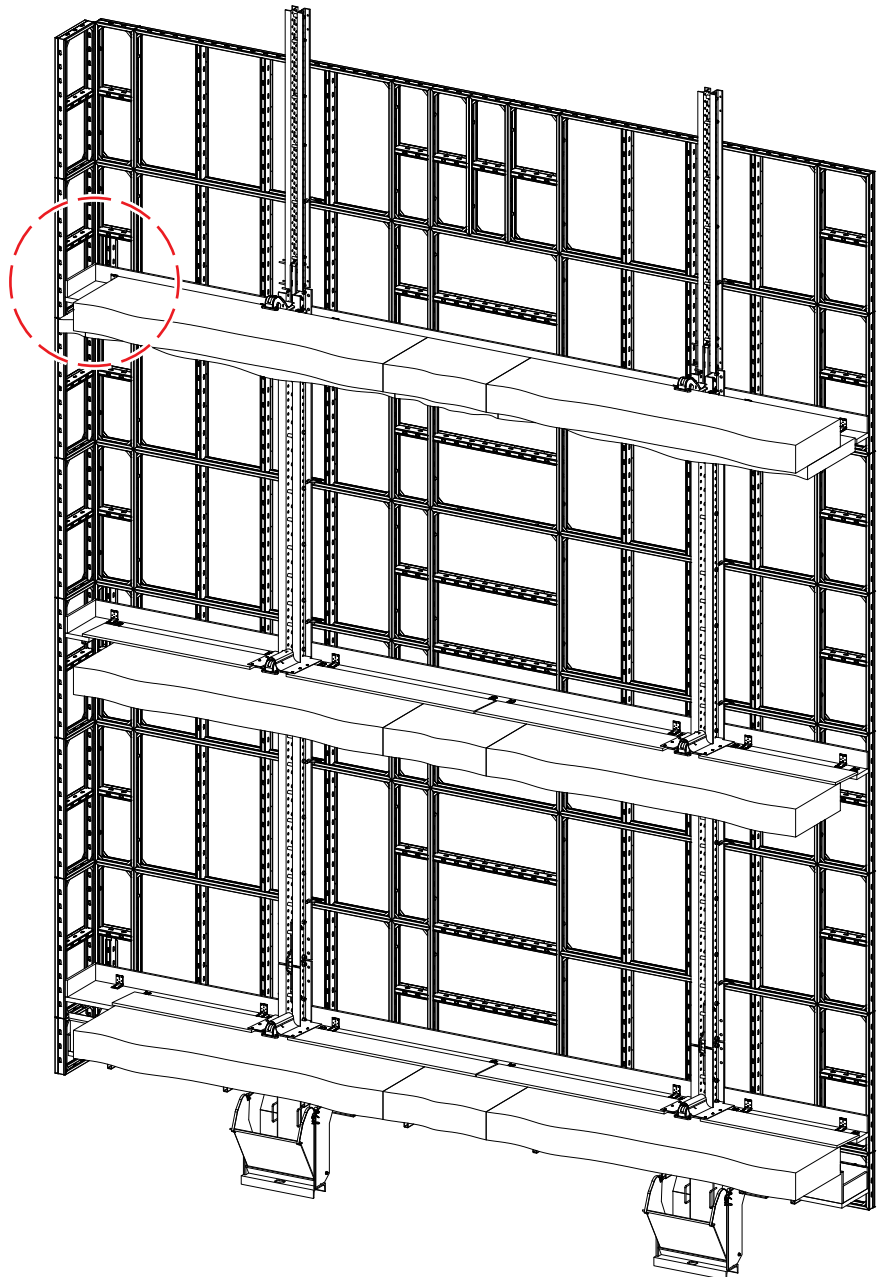
- prefabricated balconies with integrated insulation
- openings in the slabs
- recesses in the facade
- upstand beams
- embedded steel items in the slab

The Hünnebeck SAFESCREEN G2 system offers a variety of options to deal with these sorts of situations. For further information, consulting and support contact your local design office.

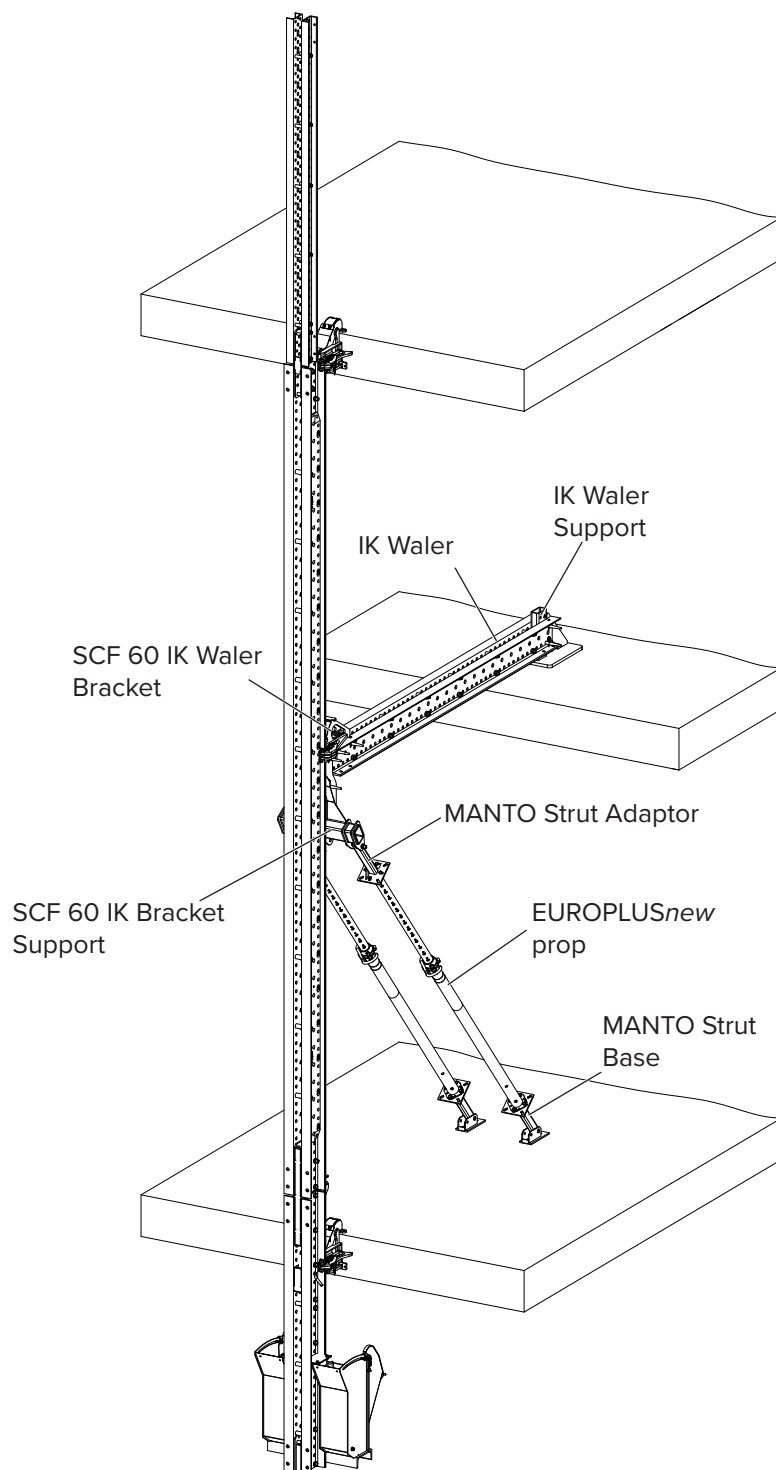


Please note that the assembly is shown incomplete for clarity and better understanding, especially with respect to the horizontal bracing of the cantilevered IK Waler.

8.5 Corners



8.6 Offsets and openings



Please note that the assembly is shown incomplete for clarity and better understanding, especially with respect to the horizontal bracing of the cantilevered IK Waler.

Please note that the use of the SCR Safety Box (code:611450) might be restricted in the example shown above. For more information contact your Hünnebeck design office.

8.7 Other

Other solutions are available. Please contact your Hünnebeck design office.

9 Assembly

The SAFESCREEN G2 units can be partially pre-assembled or fully pre-assembled, depending on the site requirements, prior to transportation.

The typical assembly options are:

- on site assembly (no pre-assembly)
- partial pre-assembly (some assembly done off-site)
- extendable cladding single rail (most of the SAFESCREEN G2 unit pre-assembled off-site and ready for transportation)
- extendable cladding truss units with folding platforms (fully pre-assembled individual units, folded and ready for transportation individually).

Some residual on-site assembly might be required to prepare or complete the SAFESCREEN G2 units, in which case the relevant steps shown in the assembly sequence of the supplied unit must be followed.

All assembly sequences shown illustrate the procedure used for typical configurations only.

Please note that unless otherwise stated, all bolts and nuts are grade 10.9 and the nuts grade 10.

9.1 Safety and working area

9.1.1 Safety

Only competent and trained persons should be involved in the assembly and checking operations.

It is the responsibility of the customer to ensure that all operatives involved in the assembly and use of SAFESCREEN G2 system have been made aware of the relevant documentation and that they understand the information contained in the documentation.

If in doubt, contact the Hünnebeck design office.

The Health & Safety issues regarding manual handling are not covered by this document.

All major defects of any item must be reported immediately.

Material deliveries are to be checked on arrival to site / place of destination as well as before each use to ensure that they are in good condition and functioning correctly.

9.1.2 Working area

Prior to any assembly, an assembly plan should be established for each unit with reference to the supplied Hünnebeck design scheme drawings.

At the start of work an adequate area for the SAFESCREEN G2 unit assembly process and access around it, must be prepared. This typically includes:

- Zone 1: to build rails, trusses and full units, with suitable access around it.
- Zone 2: storage of equipment, items required for assembly.
- Zone 3: workstation for platform assembly and plywood cutting.
- Zone 4: storage for assembled frames and platforms.
- Zone 5: storage for fully assembled units.

Zone 1 should be of adequate size to be able to assemble the largest unit required. Zones 1 and 3 should have a hard, level and even floor.



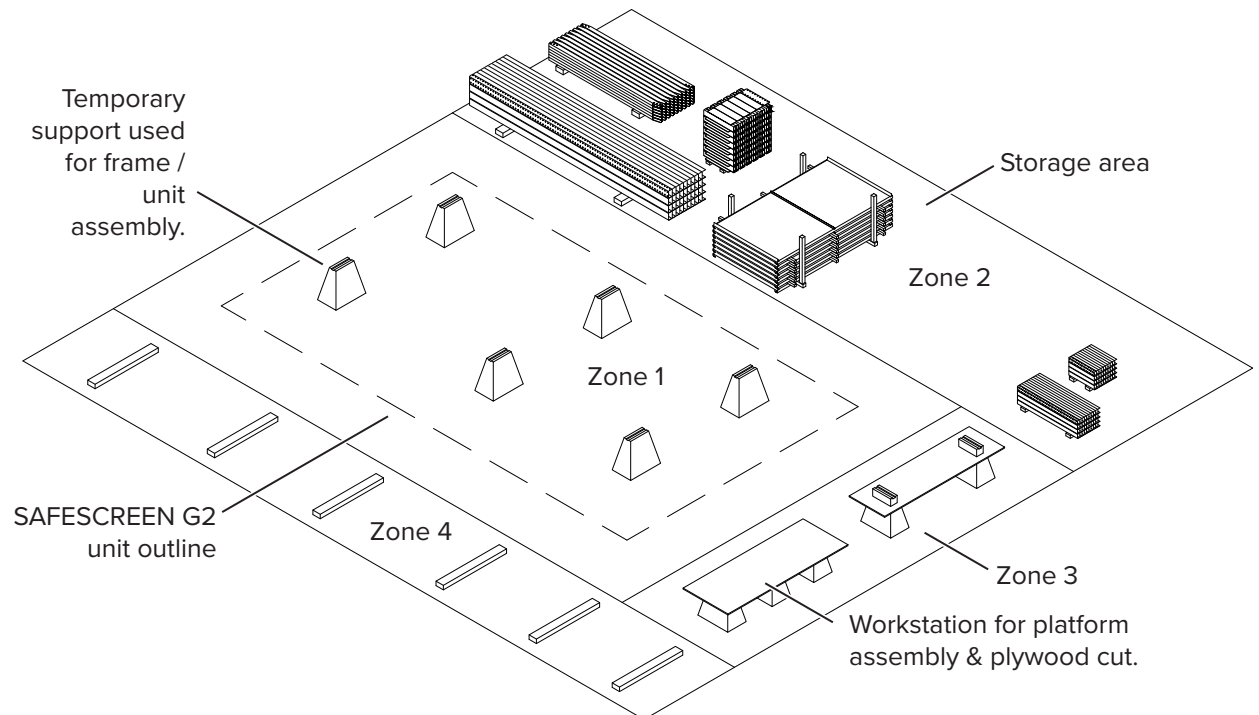
WARNING

Risk of collapse or overturning!

Use adequate trestles / packers for frames and workstation for platforms. This will allow a safe and easy work.

In some cases, stepladders or additional working platforms to assist with the assembly may be required. Make sure they stand on a firm base and are securely fixed whenever required.

The customer has to ensure crane coverage and sufficient capability is available for assembly zone and the temporary storage area of the SAFESCREEN G2 units.



9.1.3 Tools

Required tools for the assembly / disassembly of SAFESCREEN G2 units (supplied by site):

- Spanners*
- Ratchet Spanners* (preferably with keyed ends for guidance when aligning holes)
- Impact drivers* – to suit (consider cordless drivers, however, note that a number of battery packs will be required)
- Sockets sets* (long to short)
 - * Spanner / socket sizes:
 - 36 mm for M24 bolts
 - 30 mm for M20 bolts
 - 24 mm for M16 bolts
 - 19 mm for M12 bolts
 - 10 mm for M6 bolts
 - 5.5 mm is required for self-tapping screws
- Torque wrench (400 Nm)
- Cordless hammer drill with a set of drill bits
- Hammer
- Hand saw
- Circular saw
- Wood sealant and brushes

- Measuring tapes
- Level
- Waterproof marker pens
- Buckets (colour coded for the different fixings to allow easy identification)
- Steel trestles
- Timber bearers

9.2 Assembly of the rails and truss setup

This chapter shows the typical assembly of the single rails and truss setup. The components shown are for illustration purposes only.

9.2.1 Assembly of the vertical members



For job specific details such as dimensions, positioning, fixing positions and others, refer to the supplied design scheme.

Some of the following steps may require the use of a suitable lifting device or a crane.



The web holes of the Walers are made from one side of the flange with a precise dimension. Because of the manufacturing process, the tolerances are somewhat higher from the other side of the flange.

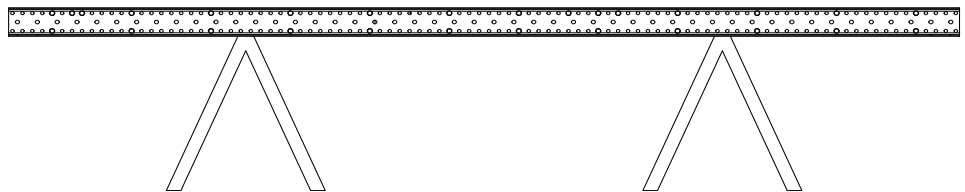
The exact side of the IK Walers must be placed on the supports facing down to guarantee that they are flush.

On INFRA-KIT **Walers M**, the exact side of the flange is always the side **without** holes in the flanges.

On INFRA-KIT **Walers L**, the exact side of the flange is always the side **with** holes in the flanges.

The IK Walers M are to be used with their exact side facing the building.

Step 1 Place the IK Walers on top of adequate temporary support.



Step 2 If required, remove the bolts and spacers as indicated in the supplied design scheme. This might require loosening further bolt connections to be able to remove the spacer sleeves.

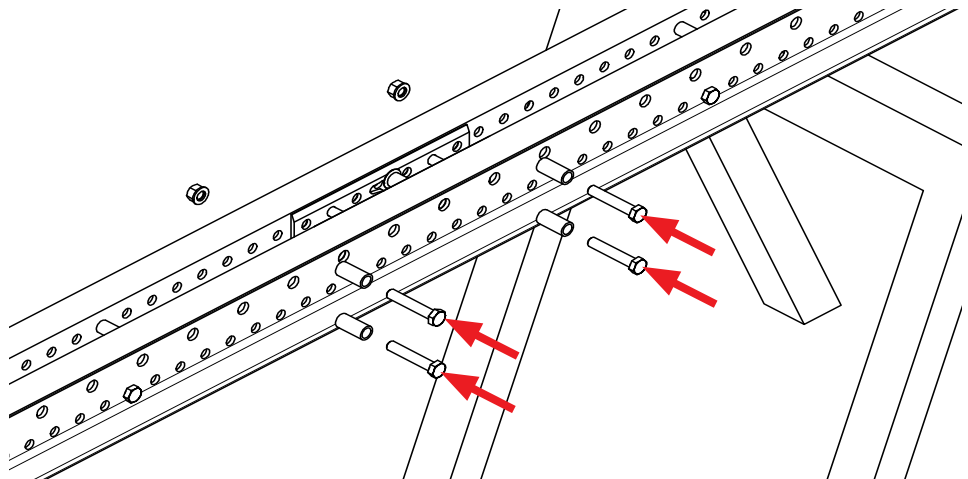
Note that the removed spacer sleeves and bolts need to be kept for re-assembly prior to the return of the material.



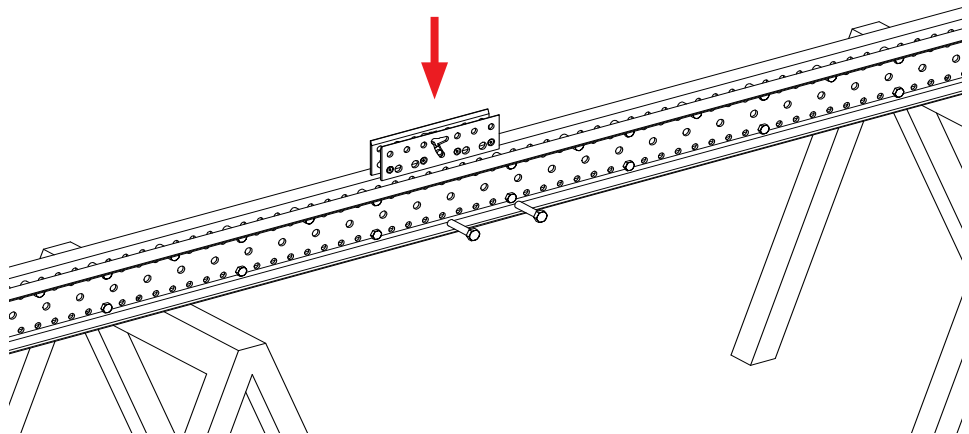
Ensure that all structurally relevant bolts are installed and sufficiently tensioned.

Torque: 300 Nm for IK Waler M and 180 Nm for IK Waler L.

Step 3 Install main Bolt Sleeve Ø30 (code:611720) where required.



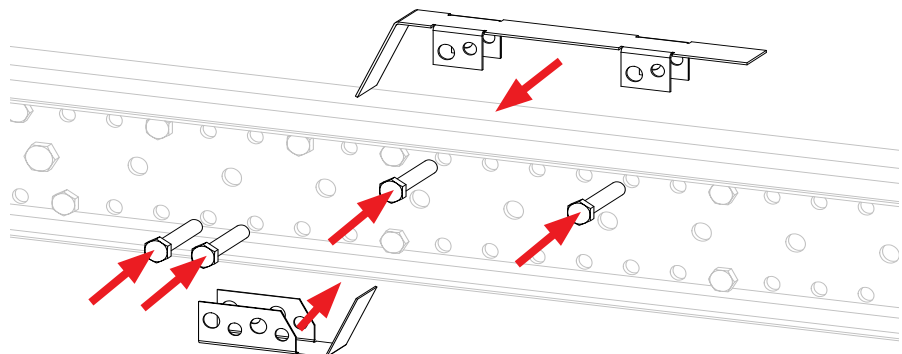
Step 4 Install the Movable Support Bobbin (code:611820) where required.



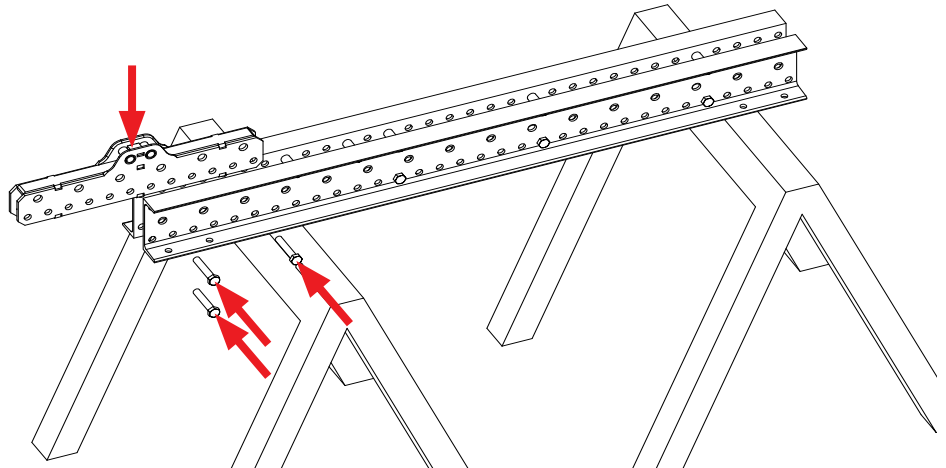
Note that all bolts to be tensioned with 270 Nm.

Step 5 Install the designated bobbin for lifting, Bolt Sleeve Ø30, where required.

Step 6 Install the sealing plates, SCR Waler Sealing Plate long (code:611624) and SCR Waler Sealing Plate short (code:611882), where required.



Step 7 Install IK connectors in the short length rails where required.



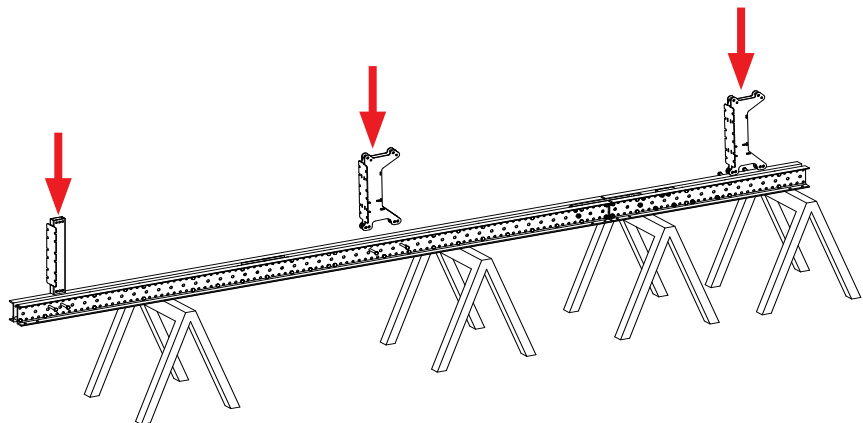
From this point forwards the use of a crane is required.

Step 8 Join rail sections as per the supplied design scheme.

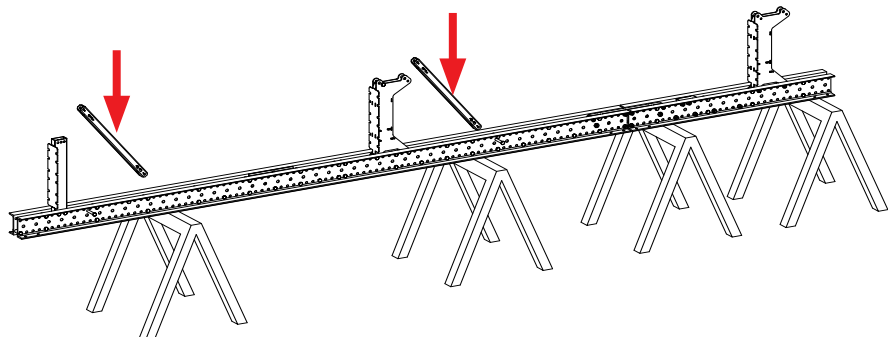
For single rails units ignore steps 9–14. Steps 9–14 refer to the assembly of the IK Walers used for the back profiles of the truss units.

Step 9 Assemble the IK Walers used for the back profile of the truss setup, see steps 1 – 8.

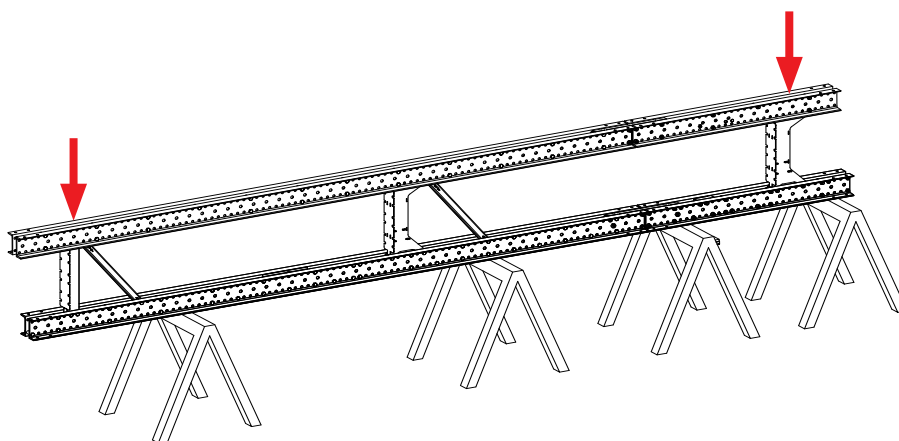
Step 10 Install platform beams.



Step 11 If required, install diagonals.



Step 12 Lift the outer IK Waler and position above the rails assembled in steps 1 – 8.



WARNING

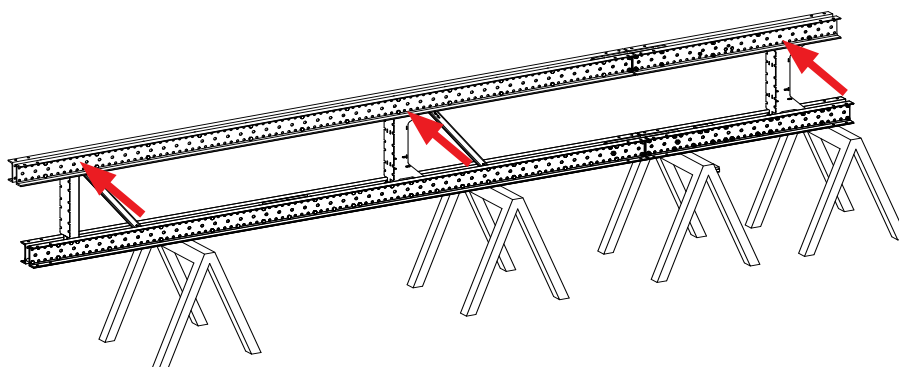
Risk of collapse or overturning!

Stabilise assembly to prevent it from falling.



Use adequate support for the back profiles of the truss when attaching to the rail.

Step 13 Attach the IK Walers to the platform beams.



Step 14 Attach the IK Walers to the diagonals.



If truss is to be temporarily stored, it must in an upright position with adequate support.

9.2.2 Assembly of the cladding

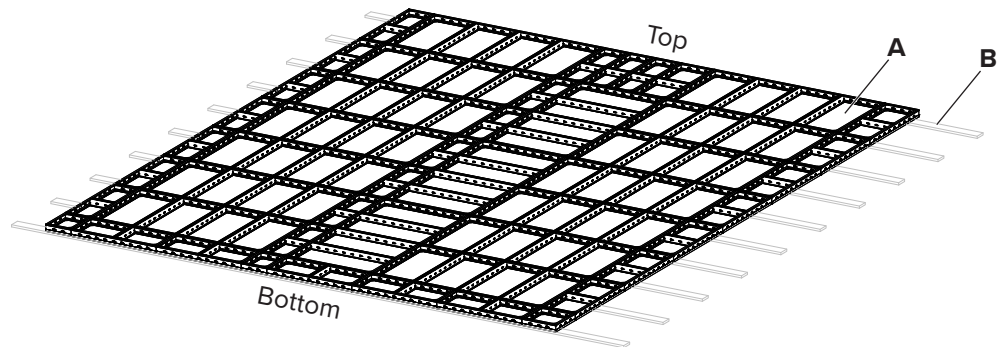
Fixed width perforated panels

NOTICE

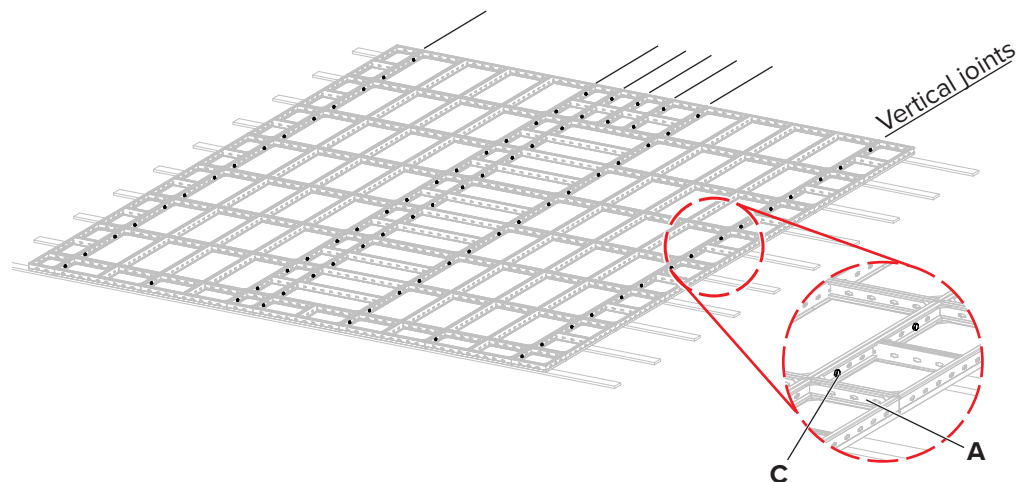
Risk of damage to the equipment!

Do not stand on the sheet infill of the SCR Cladding Panels. Lay scaffold boards on the profiles of the panels to provide access.

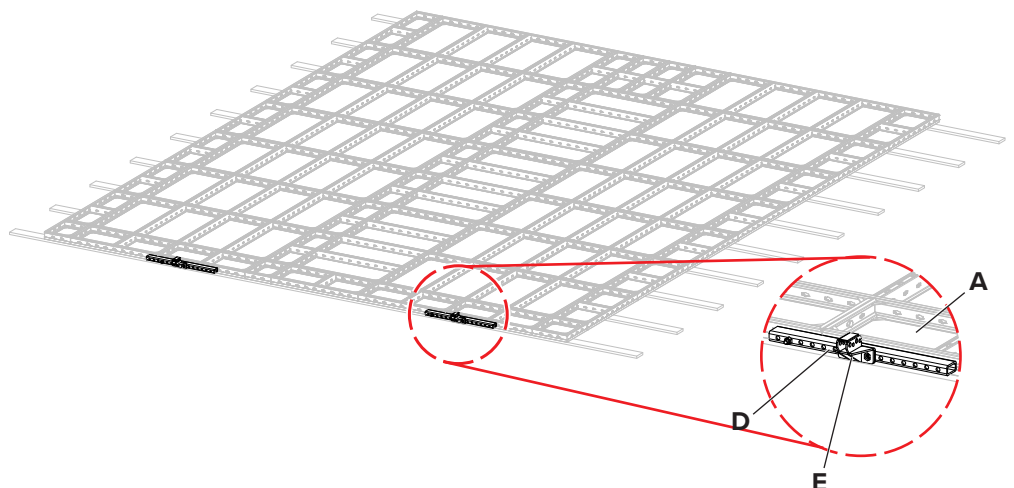
Step 1 Lay the SCR Cladding Panels (A) on top suitable timber spreaders (B).



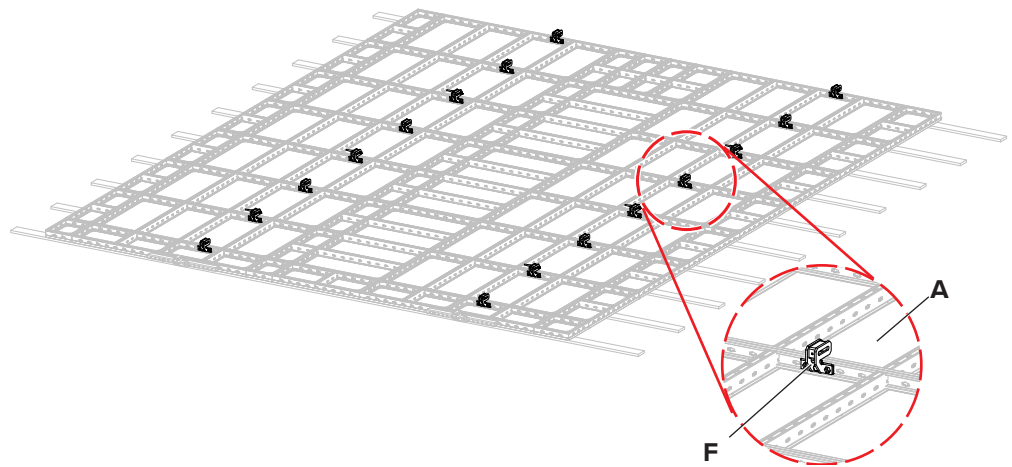
Step 2 Connect the vertical joints of the SCR Cladding Panels (A) where indicated by the supplied design scheme (C).



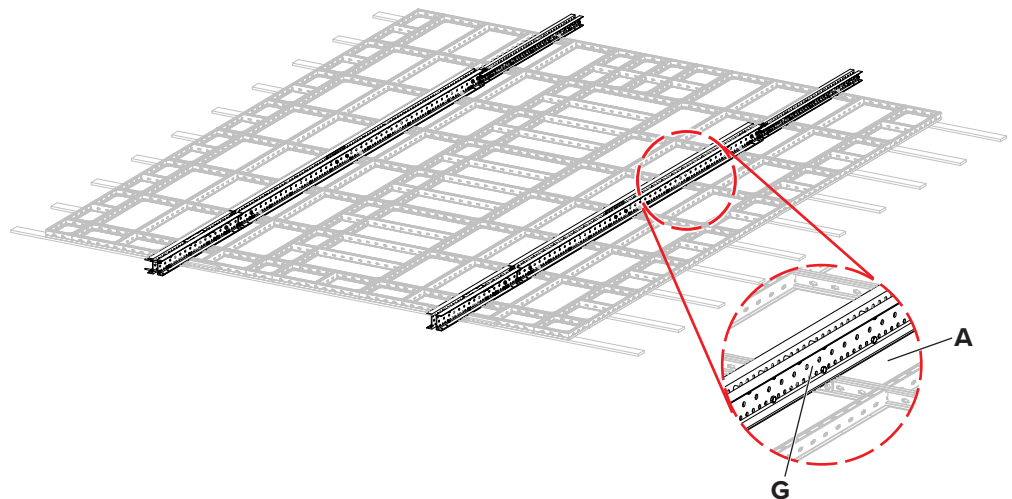
Step 3 Attach the SCR Panel Bearing Spreader Beam (code:612059, D) and the SCR Cladding Panel Bearing (code:612056, E) to the bottom row of the SCR Cladding Panels (A) as per the supplied design scheme.



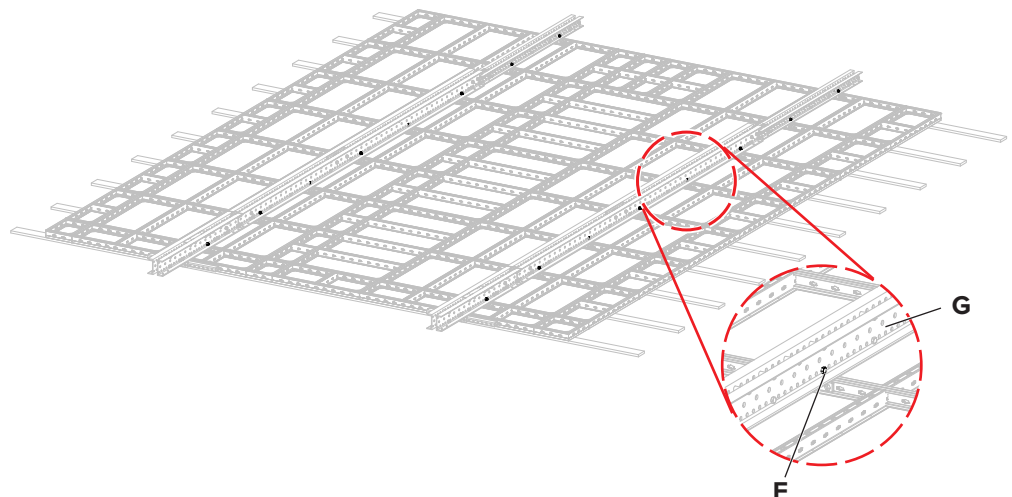
- Step 4** If specified in the supplied design scheme, attach the SCR IK Panel Cladding Web Connectors (**F**) to the SCR Cladding Panels (**A**) where indicated by the supplied design scheme.



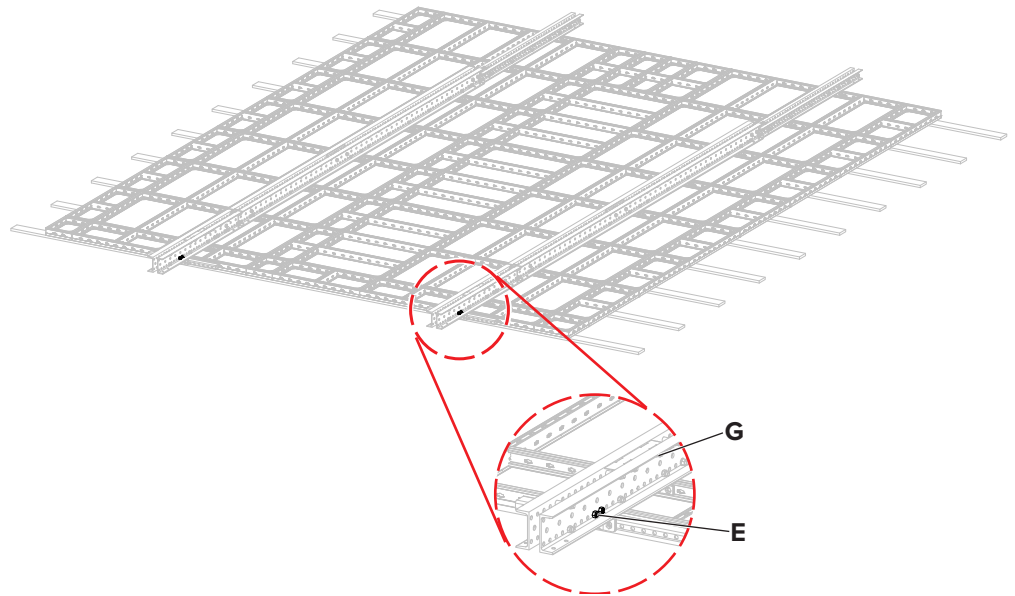
- Step 5** Lift and position the rails (G) on top of the SCR Cladding Panels (A) as per the design scheme.



- Step 6** If SCR IK Panel Cladding Web Connectors (**F**) were used in step 4, connect the rails (**G**) to the SCR IK Panel Cladding Web Connectors (**F**). If SCR IK Cladding Panel Flange Connectors were specified in the design scheme, attach them now.



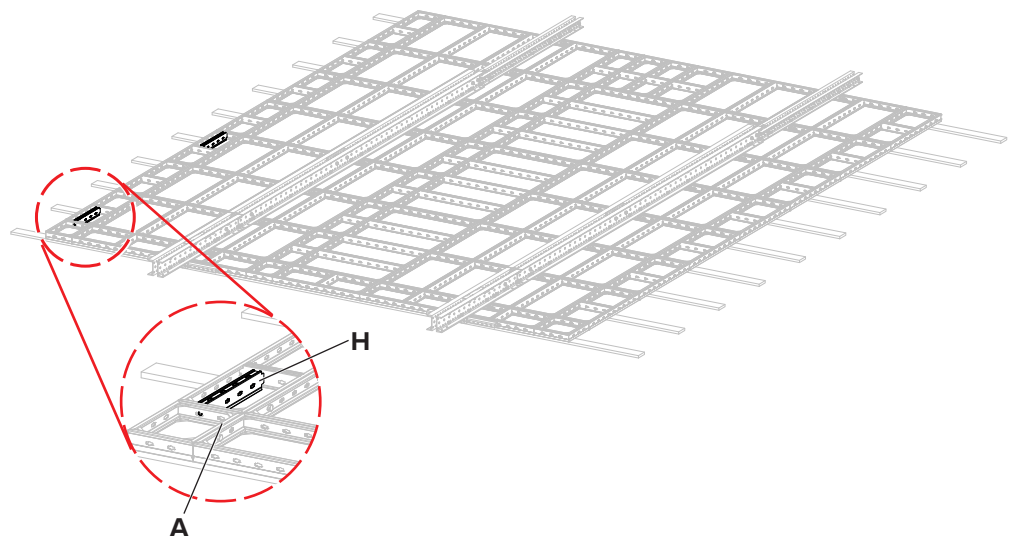
Step 7 Connect the SCR Cladding Panel Bearings (**E**) to the rails (**G**).



Step 8 If specified by the design scheme, attach the SCR IK Cladding Panel Flange Connectors to the SCR Cladding Panels.

Step 9 Secure the SCR IK Cladding Panel Flange Connectors to the rails by tightening the included M12 bolts.

Step 10 If required by the design scheme, attach the SCR Panel Ribs (**H**) to the SCR Cladding Panels (**A**).

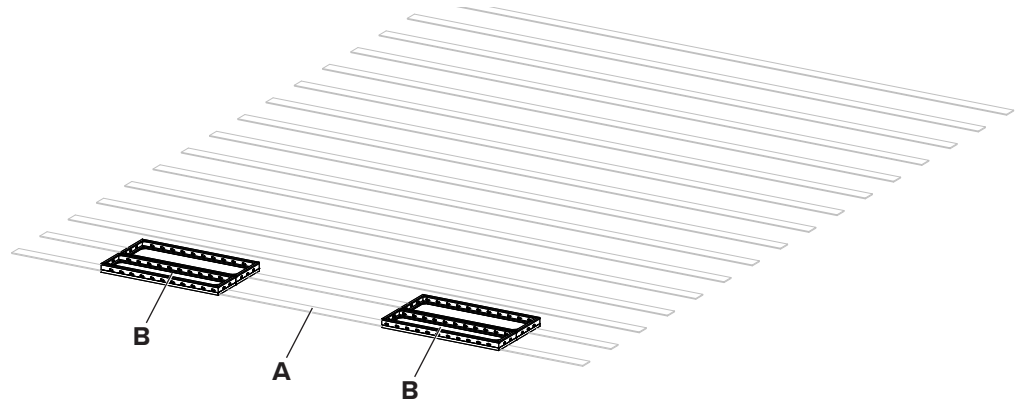


Before installation, some residual assembly may be required depending on the site requirements, such as:

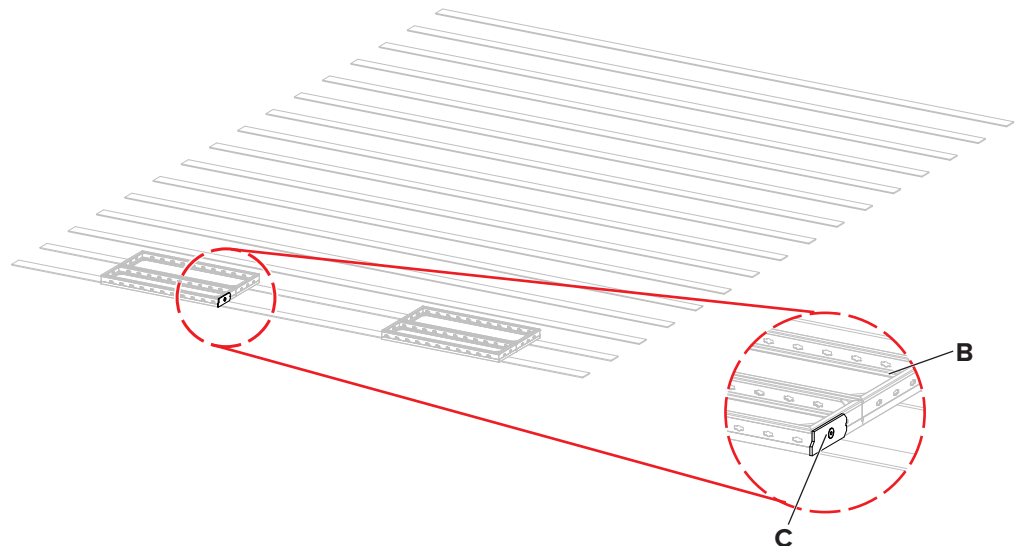
- Returns
- Safety boxes
- Safety level platforms

Extendable width perforated panels

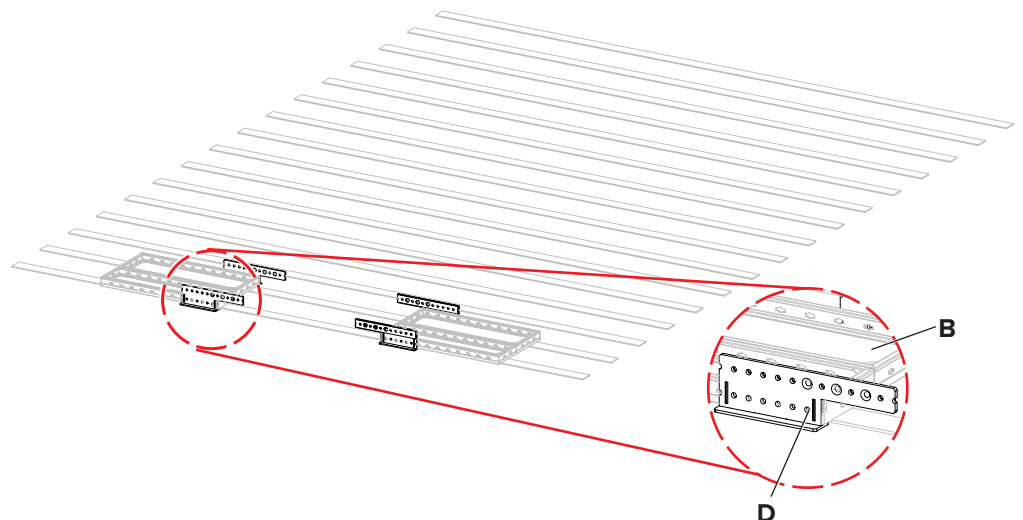
- Step 1** Lay 19 or 21 mm (3/4") thick strips of plywood (**A**) on the ground so that both sides of the SAFESCREEN G2 unit extension panels can be supported.
- Step 2** Place the SCR Cladding Extension Panels (**B**) on top of the plywood (**A**). Panel to be supported as shown.



- Step 3** Attach the SCR Extension Panel Stoppers (code:611966, **C**) to the SCR Cladding Extension Panels (**B**).

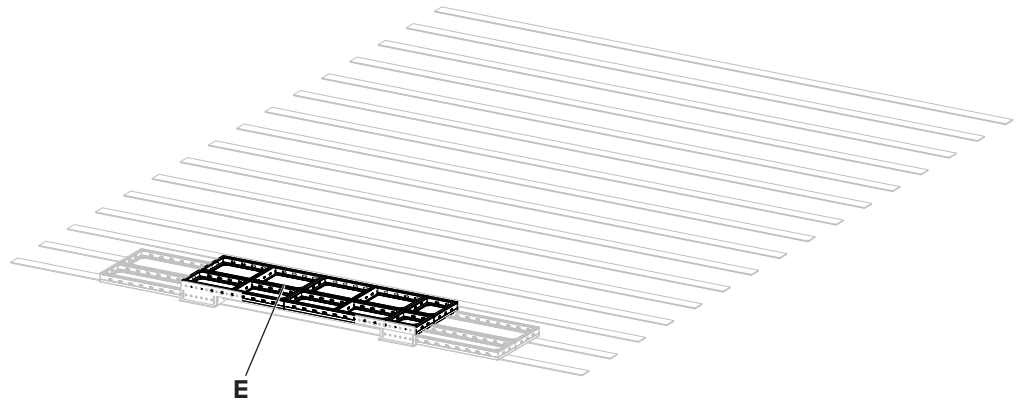


- Step 4** Place the SCR Extension Panel Bearings (code:611962, **D**) in position. Do not secure to the SCR Cladding Extension Panels (**B**).



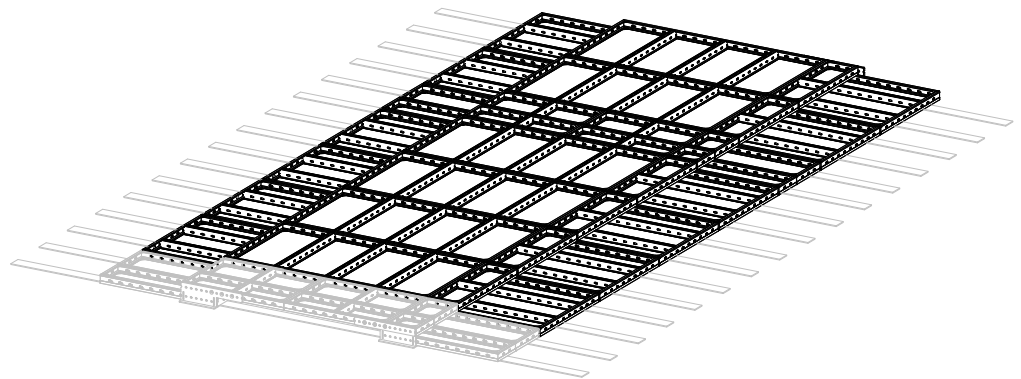
- Step 5** Build a row of SCR Cladding Panels (**E**) to be used as the central cladding section separately.

Step 6 Move the SCR Cladding Panels (**E**) built in the previous step into position.

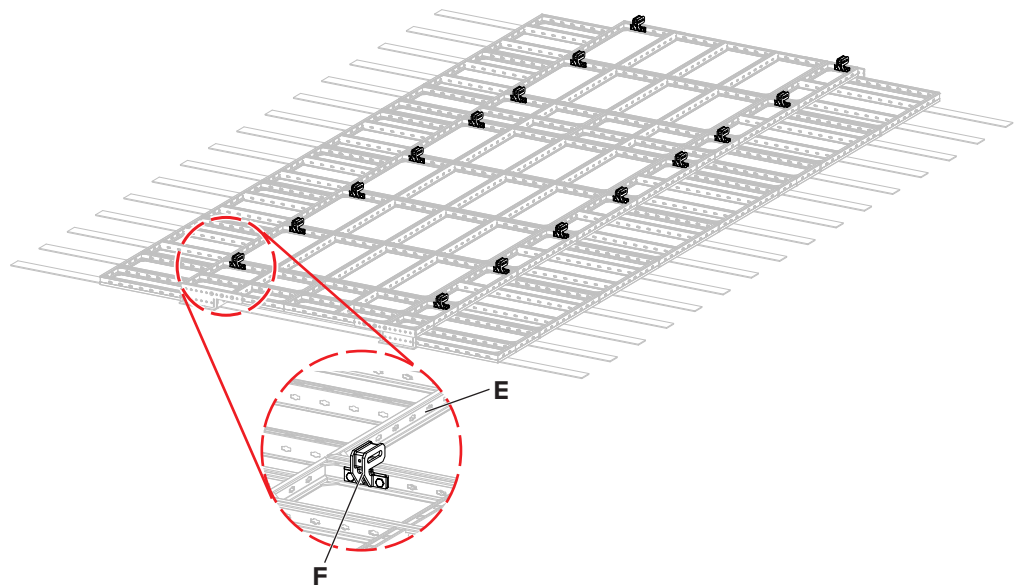


Step 7 Repeat steps 1–6 for the next rows of the cladding panels.

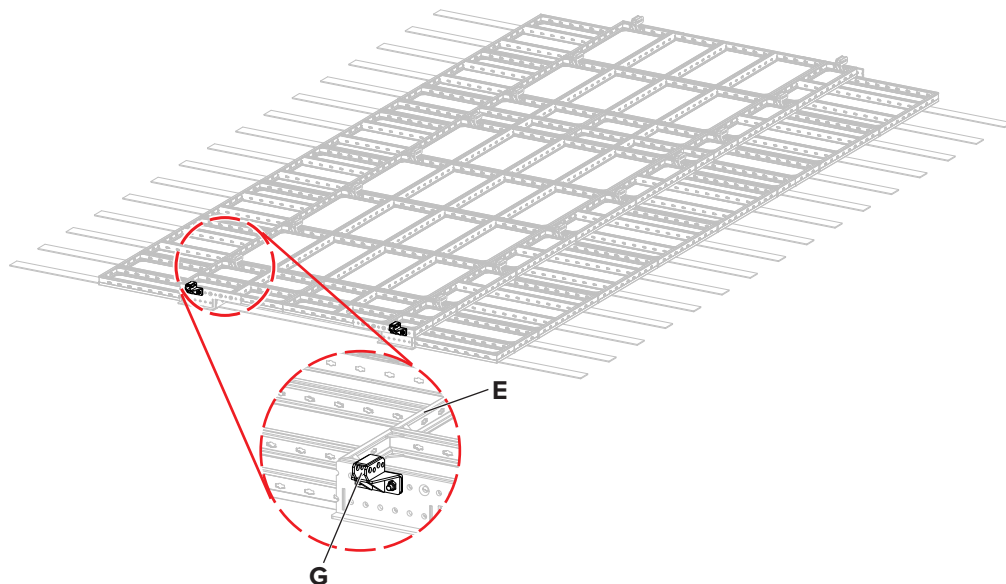
Note that the horizontal rows of the SCR Cladding Panels (**E**) shall only be connected through the SCR Extension Panel Bearings (**D**) as per the design scheme.



Step 8 Attach the SCR IK Web Connectors (**F**) to the SCR Cladding Panels (**E**) as per the design scheme.



Step 9 Secure the SCR Extension Panel Bearing (G) to the SCR Cladding Panels (E).



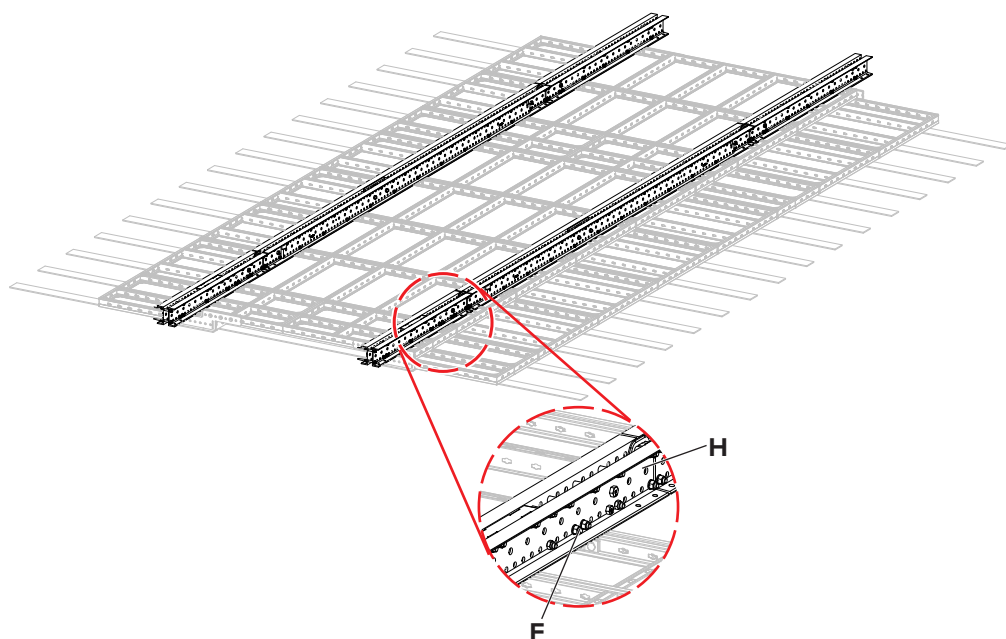
If the fixing of the SCR Cladding Panel Bearing is obstructed by a panel joint or panel rib above, proceed as follows:

- Fix the SCR Cladding Panel Bearing to the SCR Extension Panel Bearing through one of the countersunk holes in the SCR Extension Panel Bearing. Fix with CT_CSK_M20_04 or with SCR Panel Bearing Spreader Beam (code:612059) use CT_CSK_M20_04.
- Fix the SCR Extension Panel Bearing to the panel in 2no. positions using 2no. CT_M20_04.

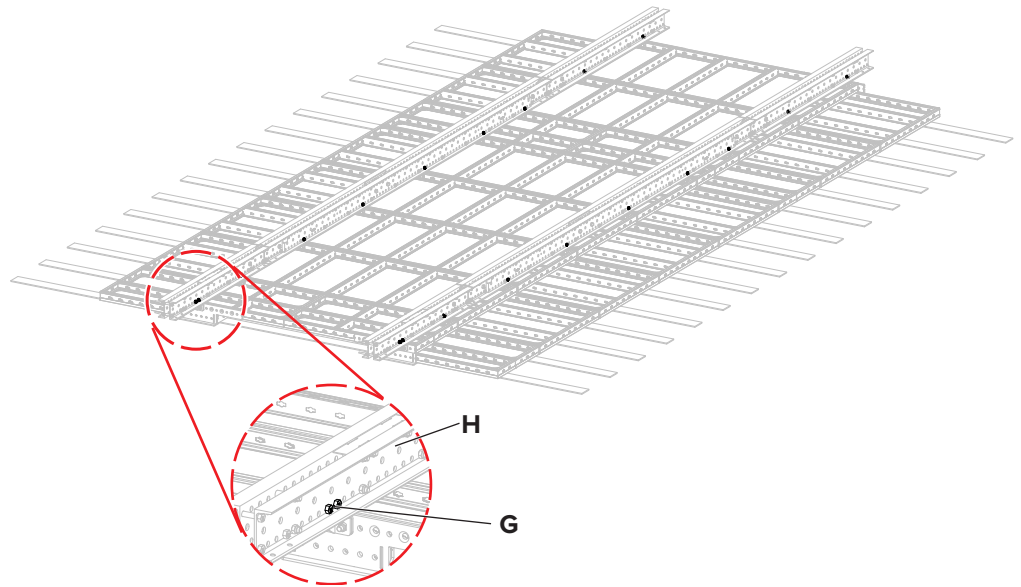
Step 10 If required, attach the SCR Panel Bearing Spreader Beam and SCR Cladding Panel Bearing to the bottom row of the SCR Cladding Panels.

Step 11 Lift and position the rails (H) build separately into position.

Step 12 Attach the rails (H) to the SCR IK Web Connectors (F). If required by design scheme, fix the SCR IK Cladding Panel Flange Connectors now.

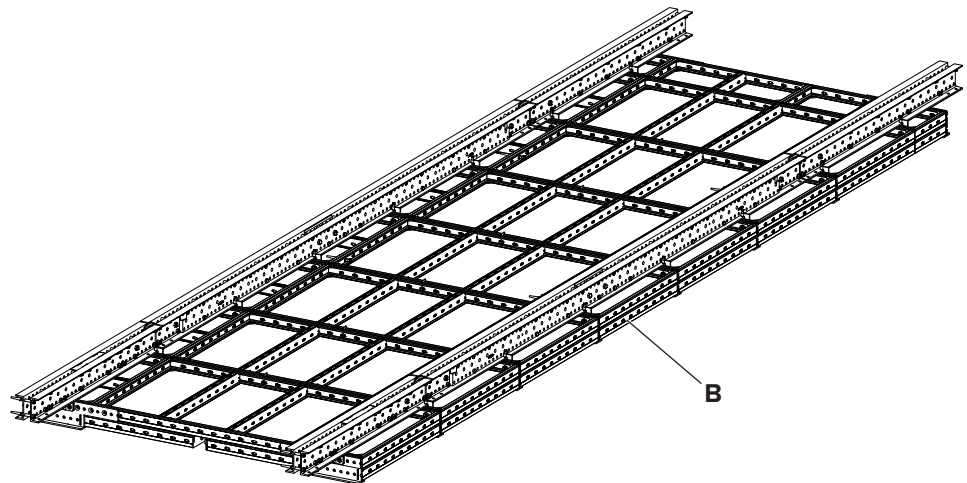


Step 13 Attach the rails (**H**) to the SCR Extension Panel Bearings (**G**).



Step 14 If required by the design scheme, attach the SCR Panel Ribs to the SCR Cladding Panels.

Step 15 Retract the wing sections of the SAFESCREEN G2 unit by pushing the SCR Cladding Extension Panels (**B**).



The SCR Cladding Extension Panels must only be pushed until they are flush with the outer edges of the SCR panels. The outer corners of the SCR Cladding Extension Panels and the SCR Cladding Panels must be flush, and the corner openings must align.

Step 16 Secure the SCR Cladding Extension Panels to the SCR Cladding Panels using the SCR Panel Transport Locking Pin (code:612124) to prevent the SCR Cladding Extension Panels from sliding out during transportation.

At this moment, the platforms can be installed as per the supplied design scheme. Platform type may vary depending on the type of vertical members. For the different platform options see page 127.

The SAFESCREEN G2 unit is now ready for storage if required. Before installation, some residual assembly may be required depending on the site requirements, such as:

- Returns
- Safety boxes
- Safety level platforms

Timber panels

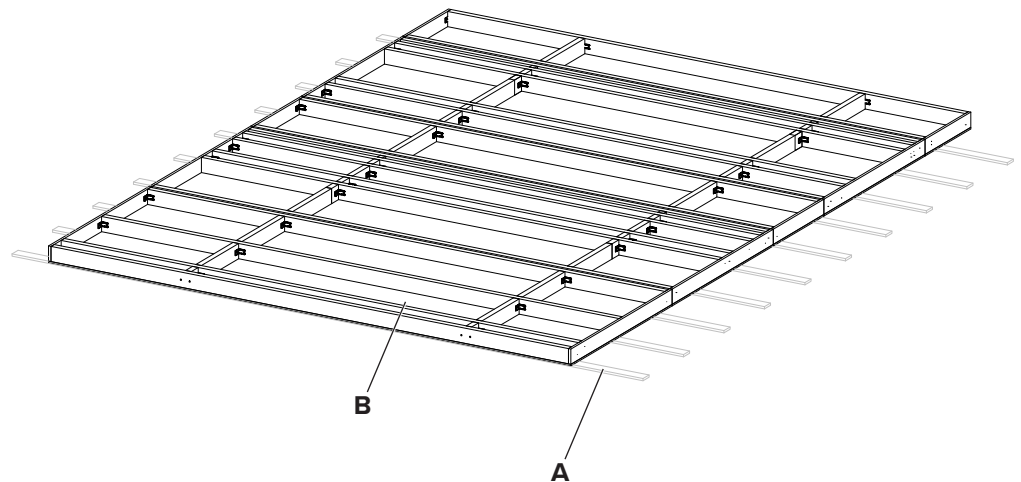
Pre-assembled timber and plywood panels can be used for cladding the SAFESCREEN G2 units. Typically, the SAFESCREEN G2 units with this type of cladding are entirely built on site with the exception of the rails and the timber panels, which are typically pre-built and sent to site.

- Step 1** On a flat and level surface, place timber spreaders (**A**) to support the SAFESCREEN G2 unit.

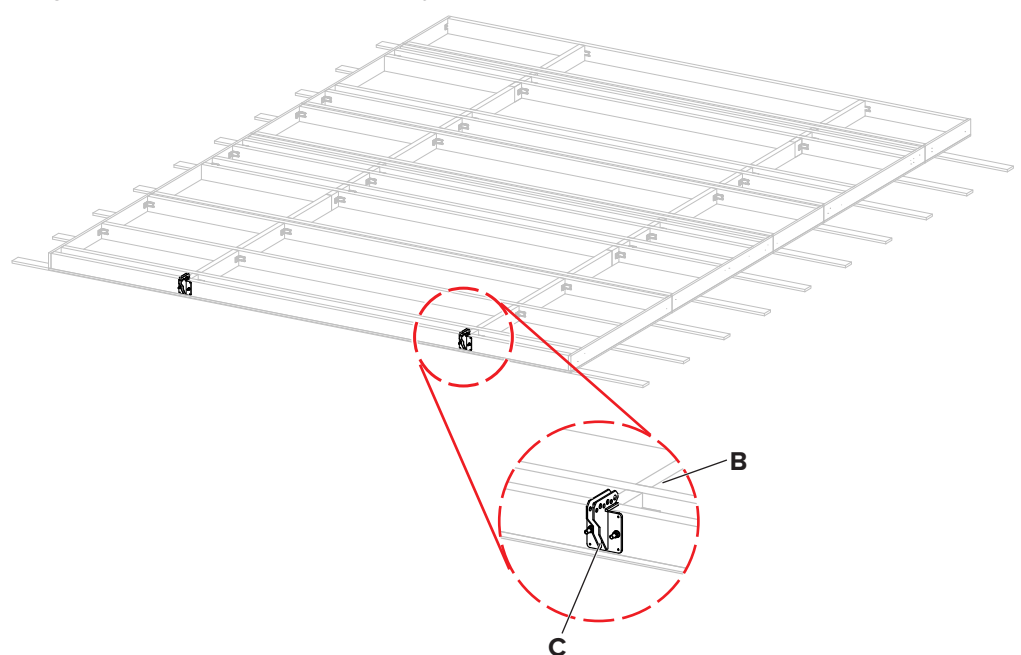


For more information regarding the size and possible support points of the SAFESCREEN G2 unit, refer to the supplied design scheme.

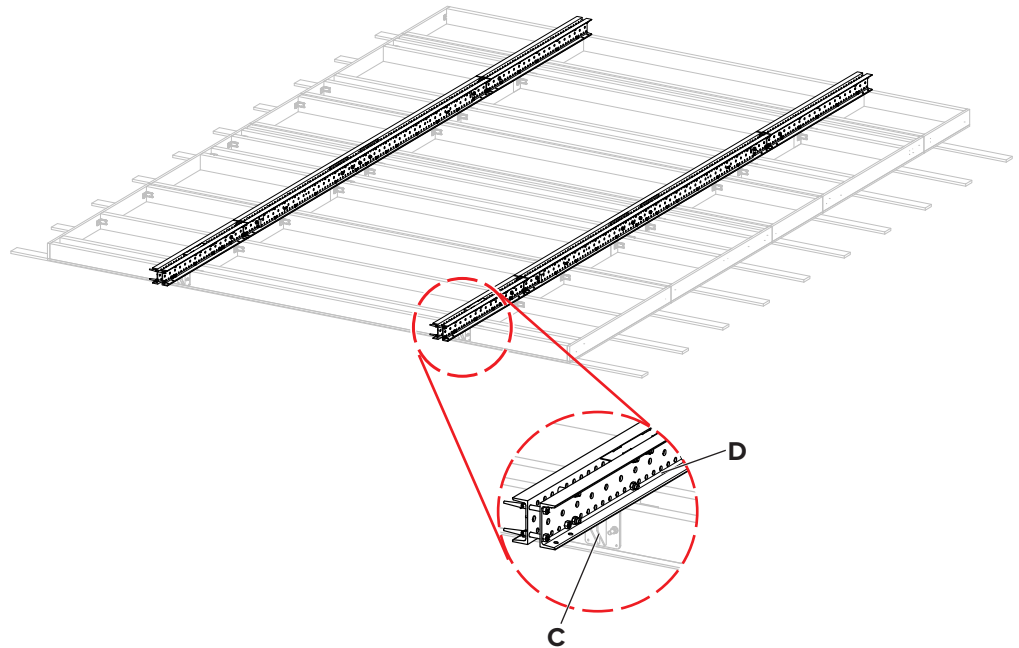
- Step 2** Lay down and position the timber panels (**B**) as per the supplied design scheme.



- Step 3** Attach the SCR Timber Beam Bearings (code:611250, **C**) to the timber panels (**B**) at the support positions. Secure the SCR Timber Beam Bearings (**C**) to the timber panels (**B**) using 2no. CT_M16_07 connection type.

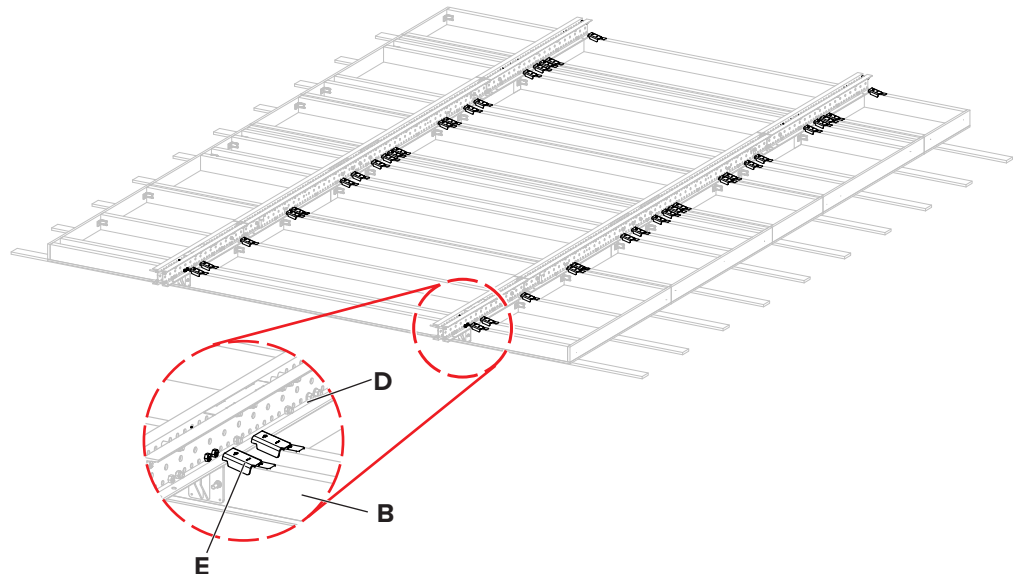


- Step 4** Lift the rails (**D**) assembled previously (see page 111) and position on top of the timber panels (**B**). The plates of the SCR Timber Beam Bearings (**C**) must be positioned between the profiles of the rail. Ensure IK Walers are parallel to each other.



For illustration purposes the rails shown are single rails. However the SAFESCREEN G2 unit may require truss rails (in which case appropriate side support is required). For the correct type and position of the rails, refer to the supplied design scheme.

- Step 5** Attach the SCR Timber Beam Bearings (**C**) to the rails (**D**) using 2no. CT_M20_07 per connection.
- Step 6** Attach the timber panels (**B**) to the rails (**D**) using SCR IK Timber Beam Connectors (code:611401, **E**). Secure the SCR IK Timber Beam Connectors (**E**) to the timber panels (**B**) using screws as specified by the supplied design scheme.



The SCR IK Timber Beam Connectors (Code:611401) must always be used in pairs. The SCR IK Timber Beam Connectors must be attached to both sides of the rail.

At this moment, the platforms can be installed as per the supplied design scheme. Platform type may vary depending on the type of vertical members. For the different platform options see page 127.

The SAFESCREEN G2 unit is now ready for storage if required. Before installation, some residual assembly may be required depending on the site requirements, such as:

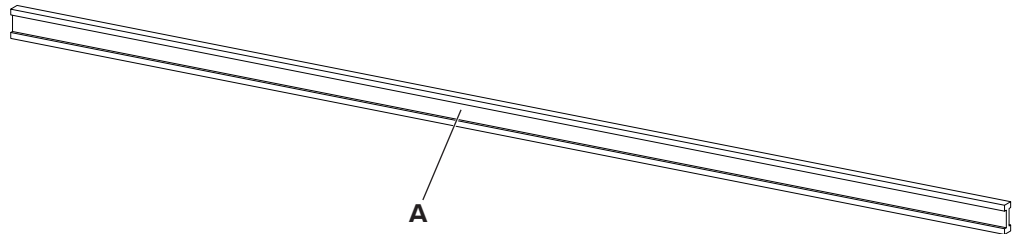
- Returns
- Safety boxes
- Safety level platforms

Timber beams with plywood or corrugated sheet

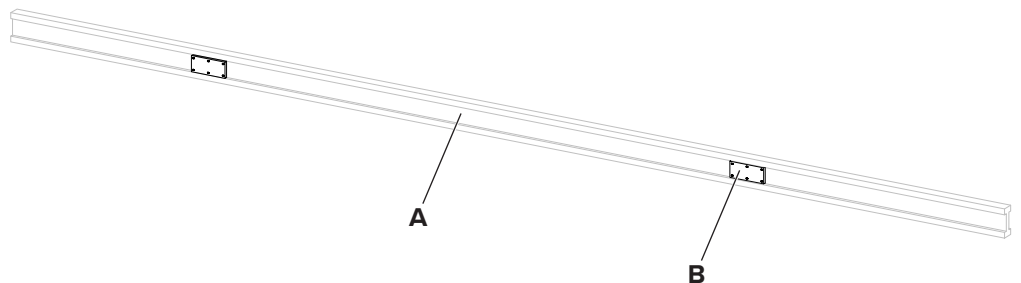
Timber beams and plywood or timber beams and corrugated sheets can be used for cladding the SAFESCREEN G2 units. Typically, the SAFESCREEN G2 units with this type of cladding are entirely built on site.

The following sequence shows only the corrugated sheet as cladding but the assembly sequence for both types of cladding are similar.

- Step 1** Cut the timber beams (A) to the required length as specified in the supplied design scheme.

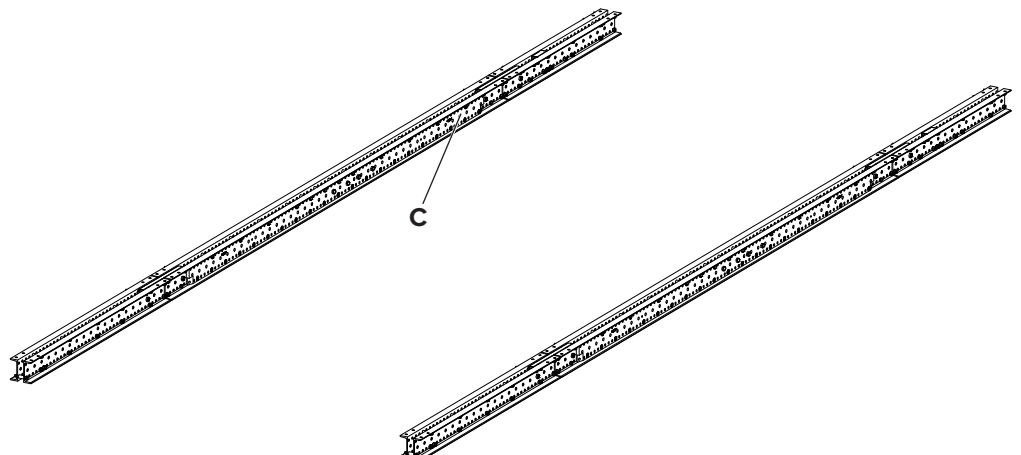


- Step 2** Position timber packers (B) on the timber beams (A) as per design scheme.



- Step 3** Drill holes through the timber beams and the timber packers as per design scheme.

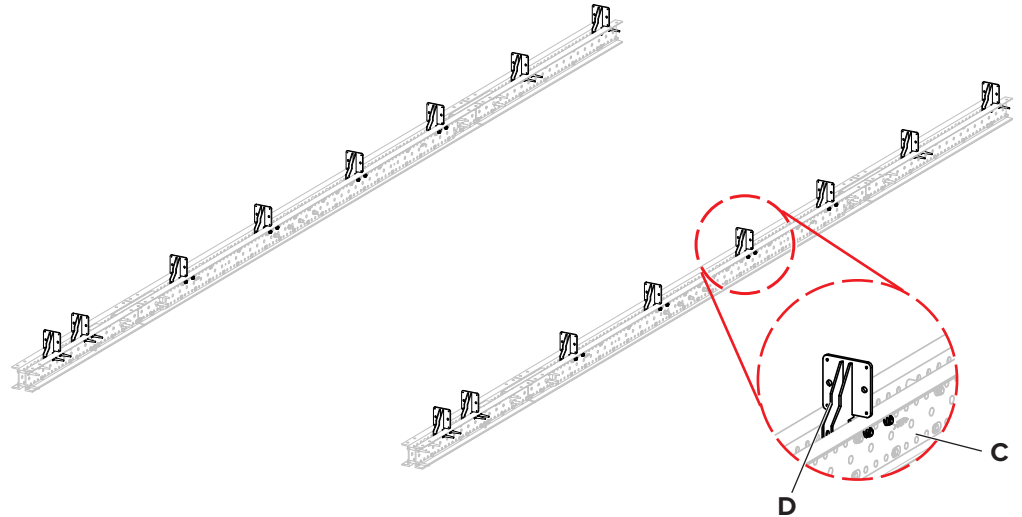
- Step 4** Lift and position the rails (C) in a separate area.





For illustration purposes the rails shown are single rails. However the SAFESCREEN G2 unit may require truss rails (in which case appropriate side support is required). For the correct type and position of the rails, refer to the supplied design scheme.

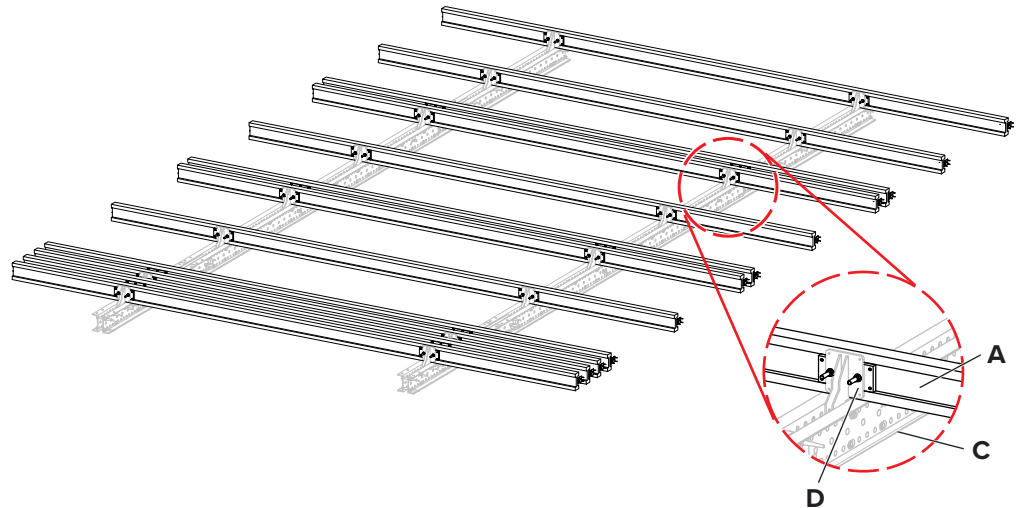
Step 5 Attach the SCR Timber Beam Bearings (code:611250, **D**) to the rails (**C**).



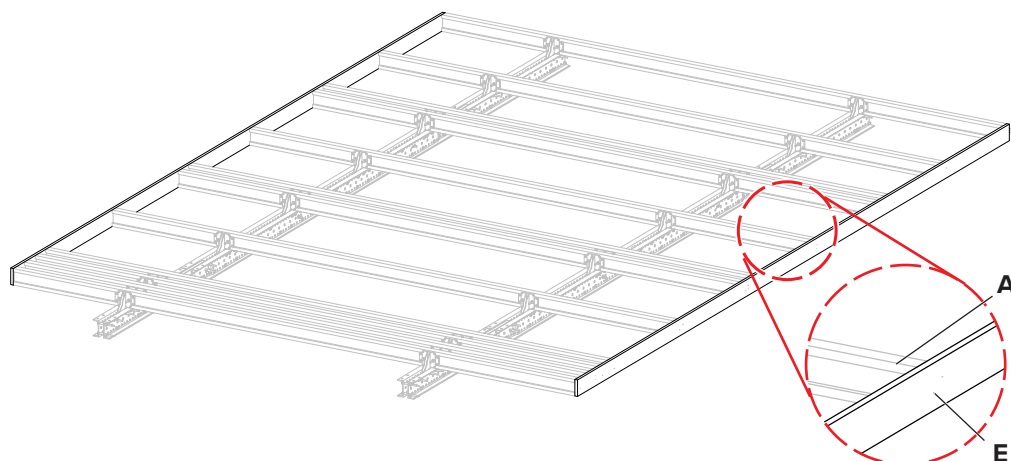
Step 6 Position the timber beams (**A**) on the rails (**C**) as per design scheme and attach it to the SCR Timber Beam Bearings (**D**).



Timber beams that are not directly connected to a SCR Timber Beam Bearing (code:611250) must be propped to the nearest timber beam that is attached to a SCR Timber Beam Bearing in order to transfer the vertical loads.

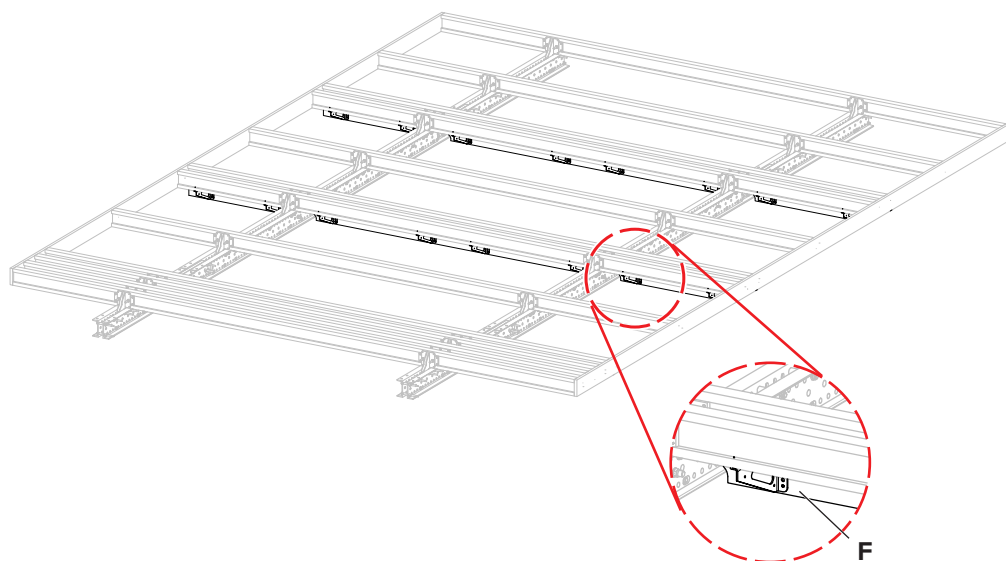


Step 7 Attach timber boards (**E**) to the end of the timber beams (**A**).

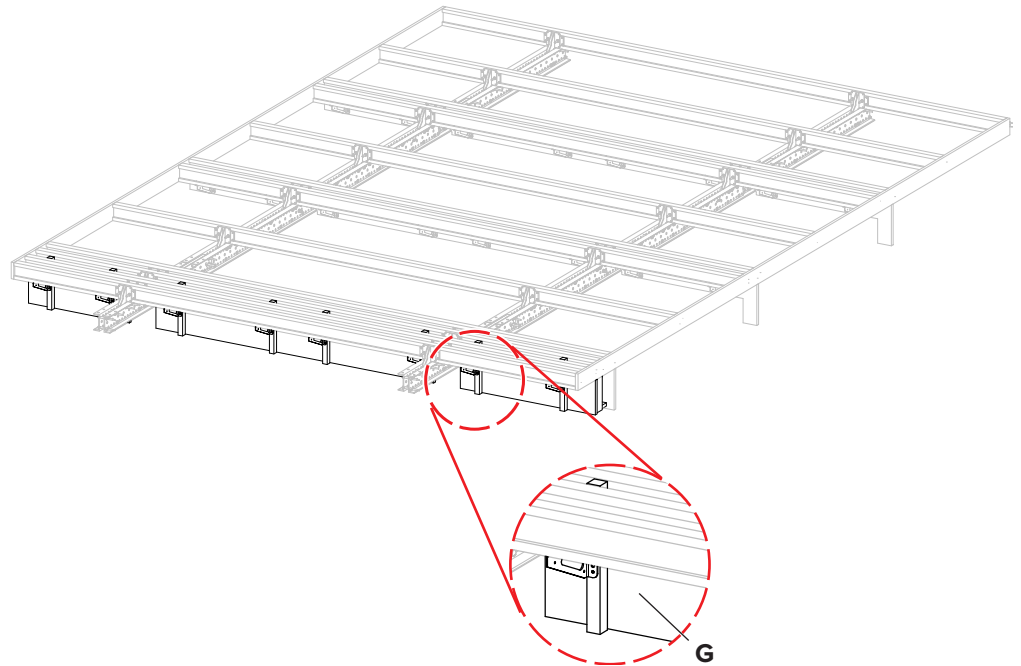


For the specific method, refer to the supplied design scheme.

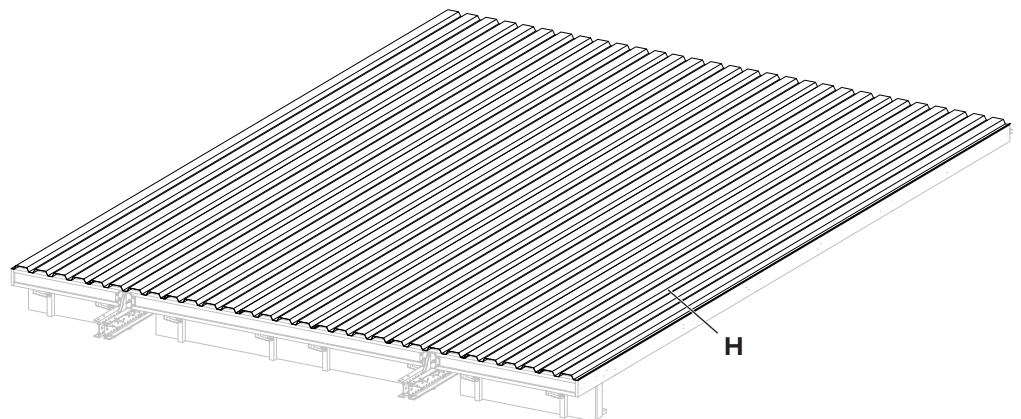
Step 8 Install the platforms (**F**) as per the supplied design scheme.
Platform type may vary depending on the type of vertical members. For the different platform options see page 127.



- Step 9** Install the safety level platform (**G**) as per the supplied design scheme. Timber packers may be required to protect the safety level platform during temporary storage.



- Step 10** Attach the corrugated sheets (**H**) as per the supplied design scheme.



The SAFESCREEN G2 unit is now ready for storage if required. Before installation, some residual assembly may be required depending on the site requirements, such as:

- Returns
- Safety boxes

9.2.3 Assembly of the platforms



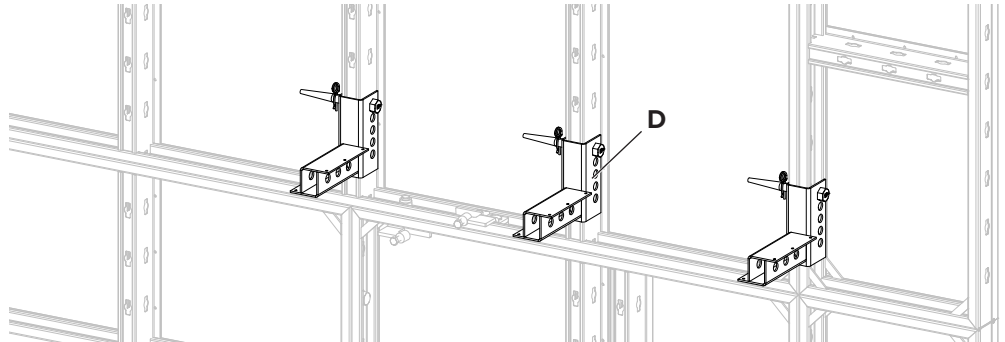
For details such as dimensions, positioning, fixing positions and others, refer to the supplied design scheme.

Platforms for single rail units

Note that for extendable cladding units, only the platform section between the rails can be pre-installed before transportation to site.

Units with corrugated sheets as cladding must be positioned with the rails facing down and the cladding beams must be attached to the rails before attaching the platforms. The corrugated sheet is then attached to the cladding beams.

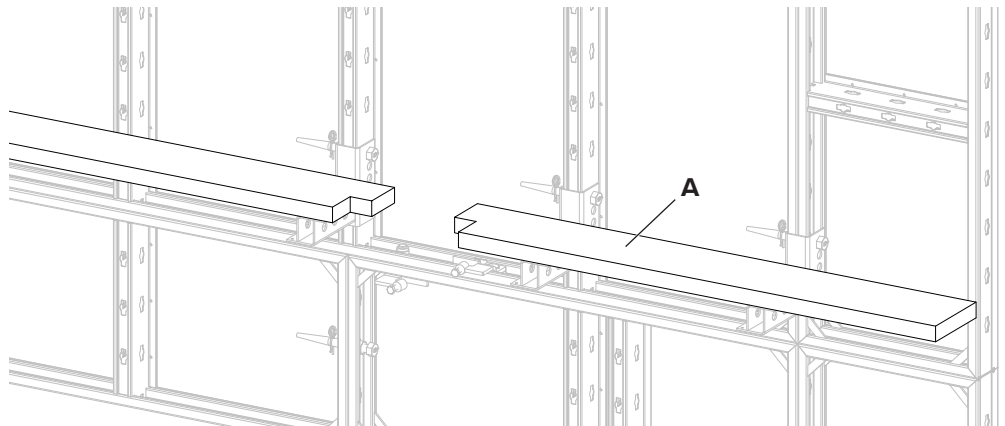
- Step 1** Cut the timber boards for the platform (A) and the toe boards (B).
- Step 2** Cut the plywood for the traps (C).
- Step 3** Attach the supporting brackets (D).



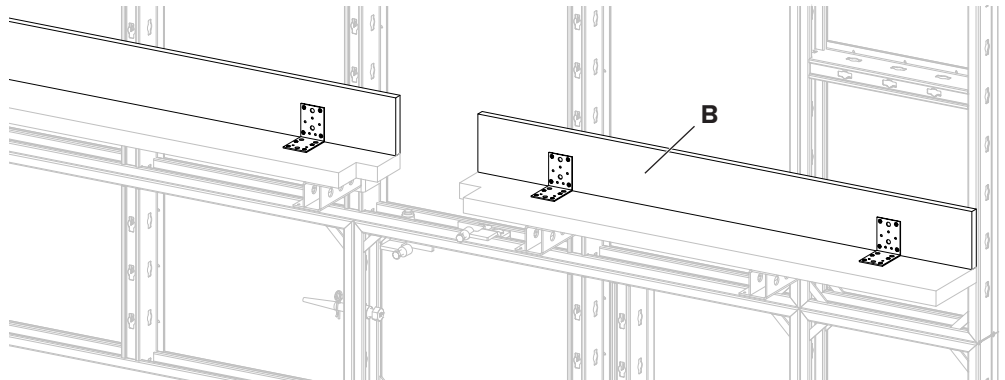
For illustration purposes the supporting bracket shown above is the SCR Panel Platform Bracket (code:611580), however the supporting brackets will vary depending on the cladding:

- SCR Cladding Panels: SCR Panel Platform Bracket secured with the CT_S_02 connection type.
- Timber beams and plywood or corrugated sheet: SCR Platform Bracket Timber Beam (code:611255) secured at the top using 2no. CT_WC_10, or if not possible then use the CT_M16_03 connection type. The SCR Platform Bracket Timber Beam can be fixed at the bottom using a CT_WC_10 connection type. A 60x60 mm timber packer can be used at the bottom as support.

- Step 4** Attach the platform (A) to the supporting brackets.

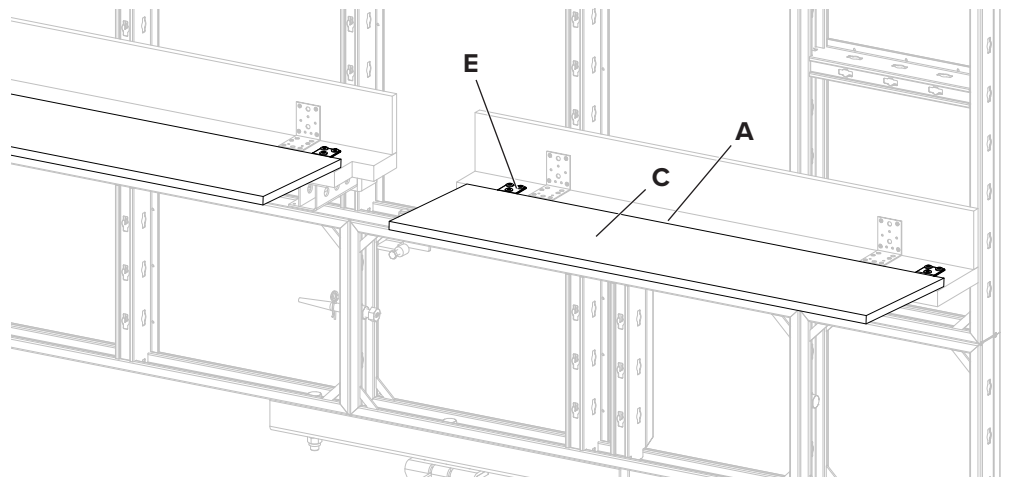


- Step 5** Attach the toe boards (B) where required to the platform.

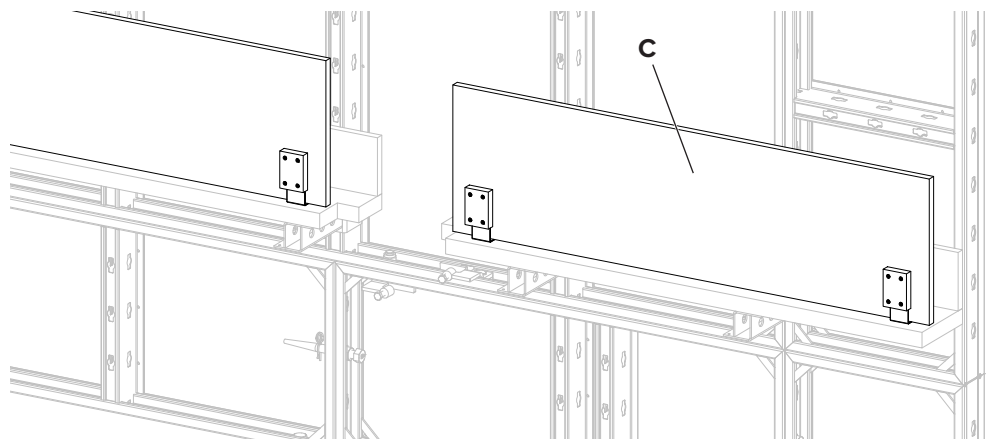


- Step 6** Attach the hinge belts (E) to the traps (C).

Step 7 Attach the traps (hinge belts, **E**) to the platform (**A**).



Step 8 Secure the traps (**C**) to the cladding in the folded-up position.



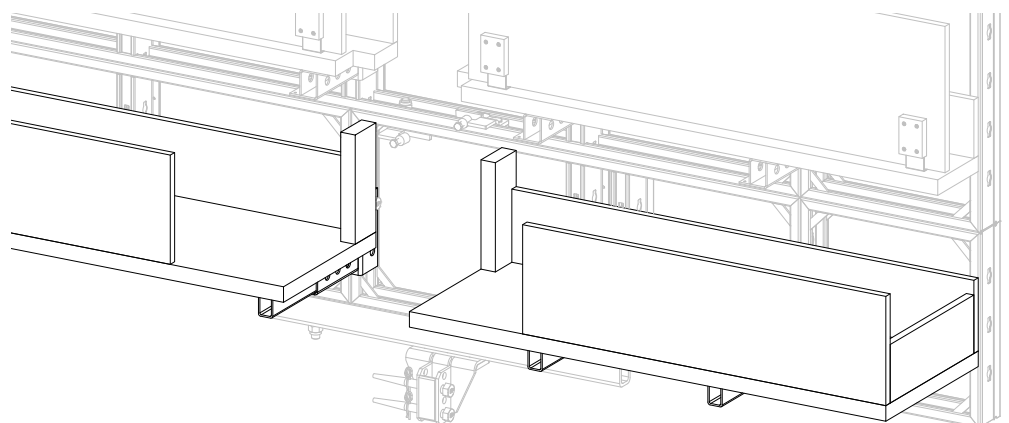
Safety level platforms for single rail units

Note that for extendable cladding units, only the platform section between rails can be pre-installed before transportation to site.

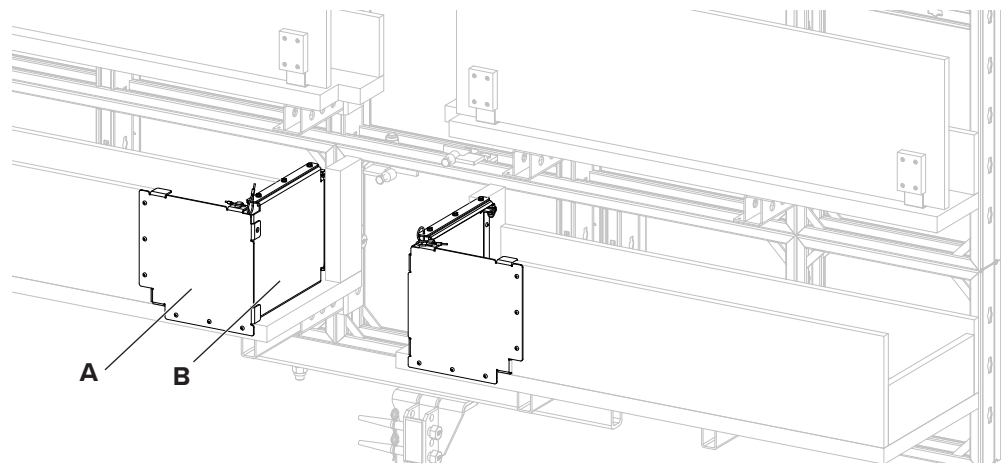
Units with corrugated sheets as cladding must be positioned with the rails facing down and the cladding beams must be attached to the rails before attaching the platforms. The corrugated sheet is then attached to the cladding beams.

If pre-assembled SAFESCREEN G2 units are to be temporarily stored on site or transported to site, the section of the safety level platform that goes beyond the footprint of the SAFESCREEN G2 unit must be transported and stored separately.

Step 1 Follow steps 1–5 of the sequence for the assembly of the platforms for single rail units.



Step 2 Install the SCR Steel Toe Plate 28x28 (code:611626, **A**) and the SCR Steel Toe Trap 28x28 (code:611675, **B**). Ensure that the SCR Steel Toe Trap 28x28 can be opened freely.



Fixed platforms for truss units

Note that fixed platforms are typically used in fixed width SAFESCREEN G2 units. Units with corrugated sheets as cladding must be positioned with the rails facing down before attaching the platforms to allow for the cladding to be attached on top.

- Step 1** Cut the plywood for the decking (**A**) and the toe boards (**B**).
- Step 2** Lay the beams (**C**) on an even surface as per design scheme.



WARNING

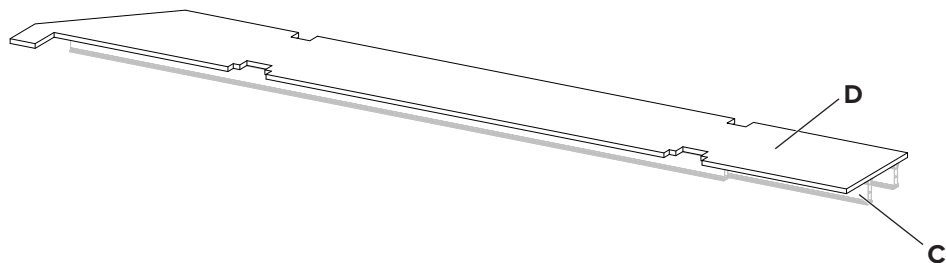
Risk of falling due to collapse of the platform!

Regardless of the decking material, the cantilever of the decking material towards the building has to statically checked.



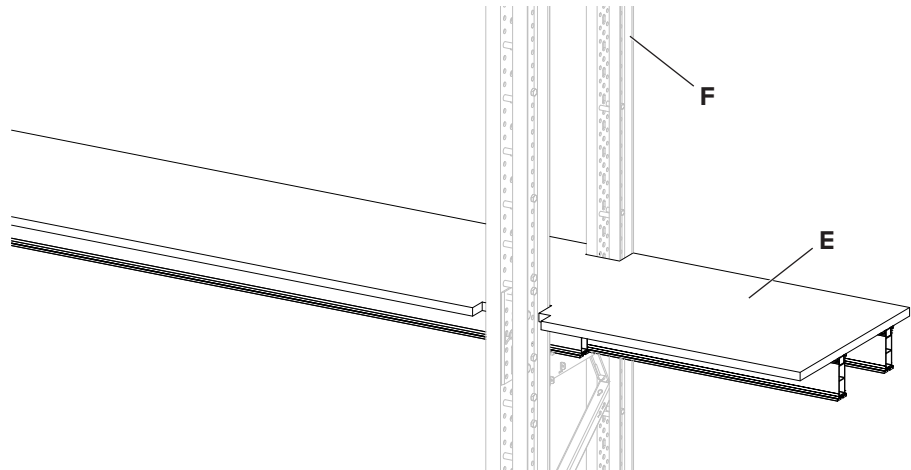
Use a spare platform beam as template.

Step 3 Attach plywood (**D**) to the beams (**C**).

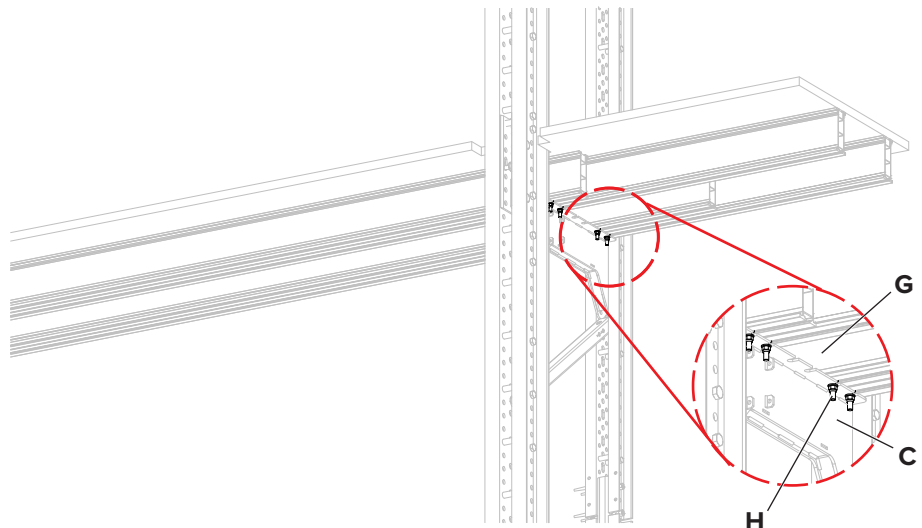


When using H 20 Beams, do not attach the plywood to the wing sections of the platform.

Step 4 Position the assembled platform (E) in place on the trusses (F).



Step 5 Attach the assembled platform (E) to the platform beams (G) using the appropriate fasteners (H).

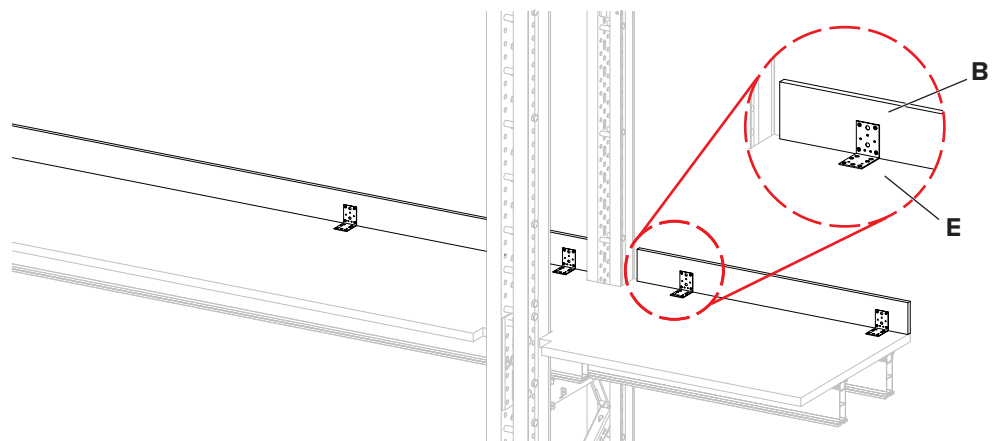


For illustration purposes, DU-AL beams are shown above, however the beams used may vary, in which case the following fixings should be used:

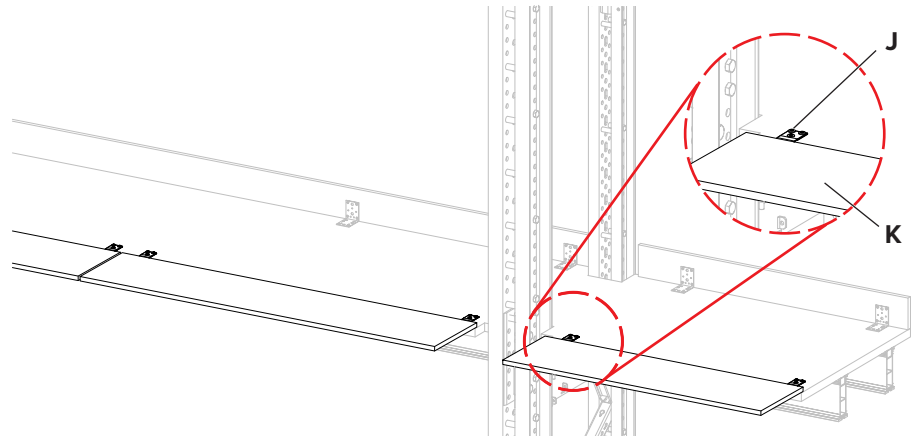
- DU-AL Aluminium Beams: T Bolt & Hex. Nut & Washer (code:718099).
- H 20 Beams: H 20 Timber Beam Clamp (code:568048).

Step 6 If required, attach the plywood to the wing sections of the platform.

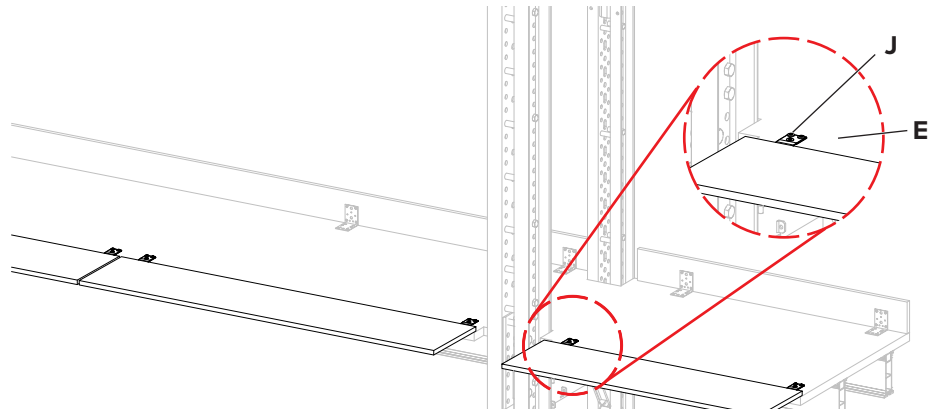
Step 7 Attach the toe board (B) to the platform (E).



Step 8 Attach the hinge belts (J) to the traps (K).



Step 9 Attach the trap (hinge belts, J) to the platform (E).

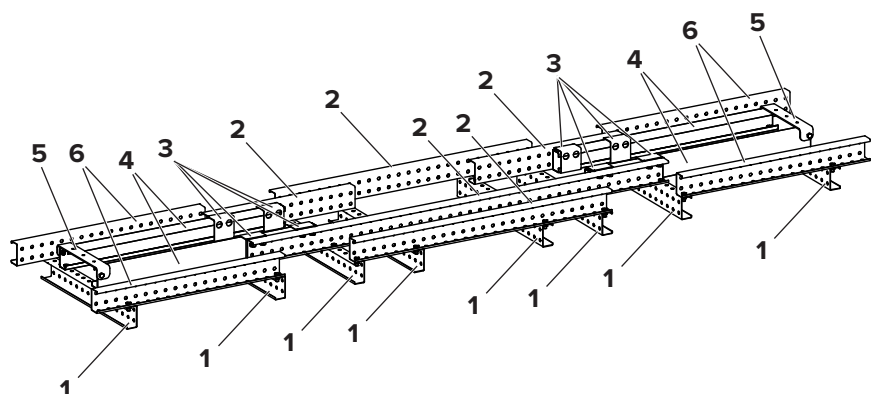


Step 10 Retract and secure the trap (K) to the cladding in the folded-up position.

Folding platforms for truss units

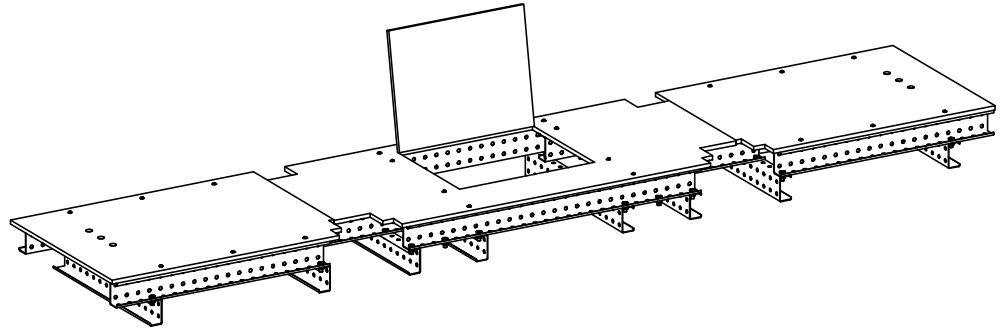
Note that folding platforms are typically used in extendable width SAFESCREEN G2 units.

Below is a view of the components of a typical folding platform (plywood not shown for clarity).



- 1 HD Channel – transversal channels
- 2 HD Channel – main longitudinal
- 3 Guide Box (code:595142)
- 4 Extension Channel 138
- 5 Pivot Plate (code:595143)
- 6 HD Channel – longitudinal

It is possible to have folding platforms with a latch for ladder access.

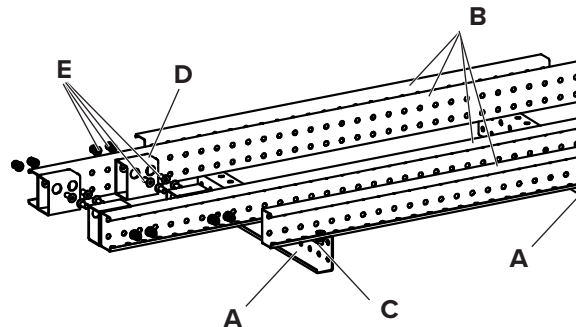


Shown below is the assembly sequence of a typical folding platform for reference.

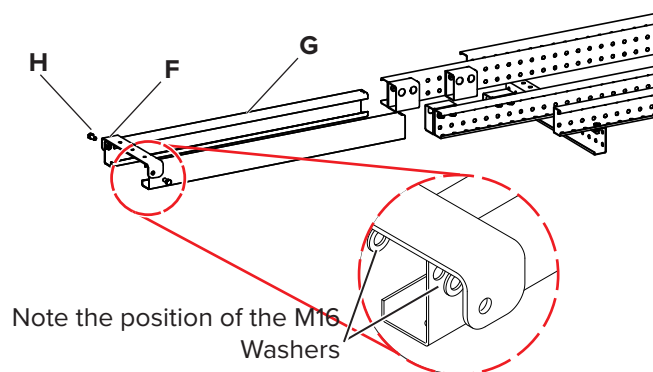


The folding platform may vary depending on the site requirements. For the required list of components, refer to the design scheme supplied for more information.

- Step 1** On a flat and level surface, place the transversal HD Channels (**A**) at the correct distance from each other.
- Step 2** Place longitudinal HD Channels (**B**) on top of the transversal HD Channels (**A**) at the correct position.
- Step 3** Secure using the CT_M16_01 connection type (**C**).
- Step 4** Position the Guide Box (**D**) and secure using 2no. CT_M16_02 connection type (**E**).

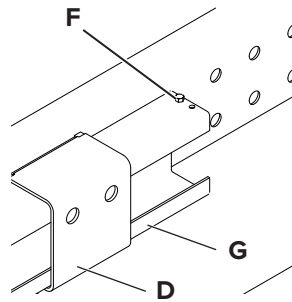


- Step 5** Repeat step 4 for the other positions of the Guide Boxes.
- Step 6** Attach the Pivot Plate (**F**) to 2no. Extension Channel 138 (**G**). Secure using the CT_M16_02 connection type (**E**).

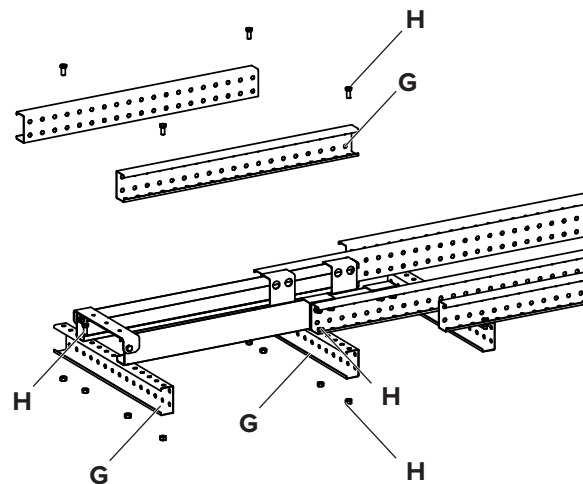


- Step 7** Insert the 2no. Extension Channel 138 (**G**) into the Guide Boxes (**D**).

- Step 8** Secure the 2no. Extension Channel 138 (**G**) using an additional CT_M6_01 connection type (**F**) to prevent over-extending past the Guide Box (**D**).

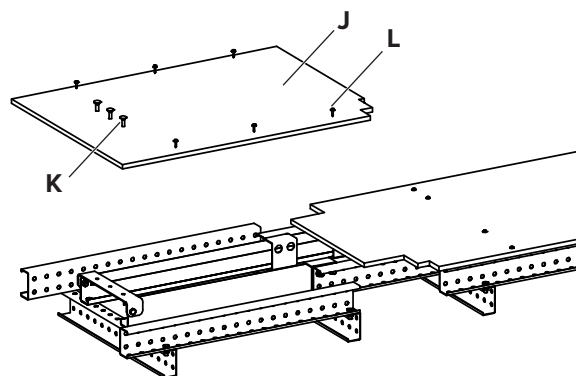


- Step 9** Attach additional HD Channels (**G**) using the CT_M16_01 connection type (**H**).



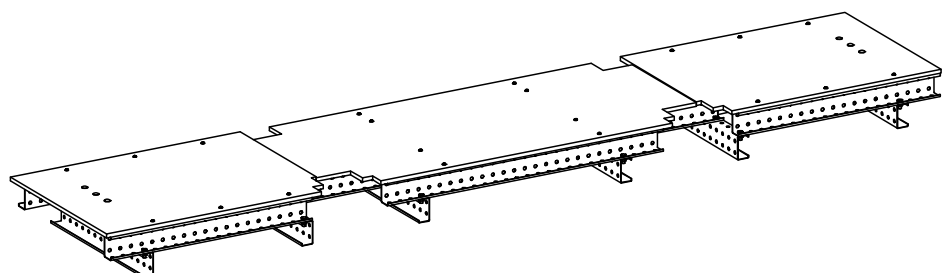
- Step 10** Cut the plywood to suit each section of the folding platform.

- Step 11** Place the plywood (**J**) on top of the respective section of the folding platform. Secure using the CT_M12_02 connection type (**K**) and drilling screws (**L**).



Before fixing the plywood check that longitudinal beam and transversal beams are square to each other.

- Step 12** Repeat steps 04–11 for the other side of the folding platform.



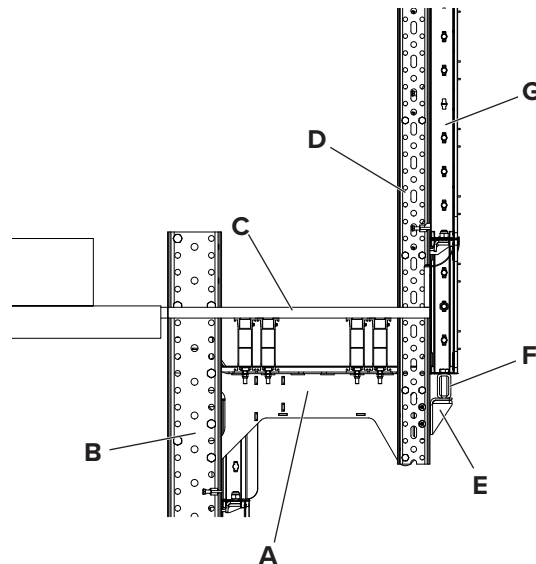
The assembly of the folding platform is now complete.

Cantilevered platform

If a SAFESCREEN G2 unit is required to have a cantilevered platform, the assembly of the cladding must stop at the point where the cantilevered platform is to be positioned.

If the SAFESCREEN G2 unit is built with the cladding facing down, the unit must be rotated so that the cladding is facing upwards so that the cantilevered platform can be assembled. For more information regarding lifting, see page 141.

The following sequence assumes that the SAFESCREEN G2 unit has been rotated and that it has been placed on top of suitable temporary support.



A SCR Platform Beam 0.75 m Rigid (code:612263)

B IK Waler M (rail)

C Platform

D IK Waler L

E SCR Cladding Panel Bearing (code:612056)

F SCR Panel Bearing Spreader Beam (code:612059)

G SCR Cladding Panels

Note that the illustration above shows a unit in its vertical position, and it is used only to reference the components used in a typical configuration of a cantilevered platform. The assembly of the cantilevered platform is done during the on-site assembly while the SAFESCREEN G2 unit is in a horizontal position.



Ensure that the SAFESCREEN G2 unit is stable and capable of supporting the additional components. Additional temporary supports, especially against overturning, may be required (not shown below).

Step 1 Attach a SCR Platform Beam 0.75 m Rigid (**A**) to the rails of the SAFESCREEN G2 unit built previously (**B**). Secure using the appropriate fasteners.



The fasteners used to secure the SCR Platform Beam 0.75 m Rigid (code:612263) vary depending on the IK Waler used to form the rails.

- To attach to an IK Waler L, secure using 2no. CT_M16_04 per connection.
- To attach to an IK Waler M, secure using 2no. CT_M20_07 per connection.

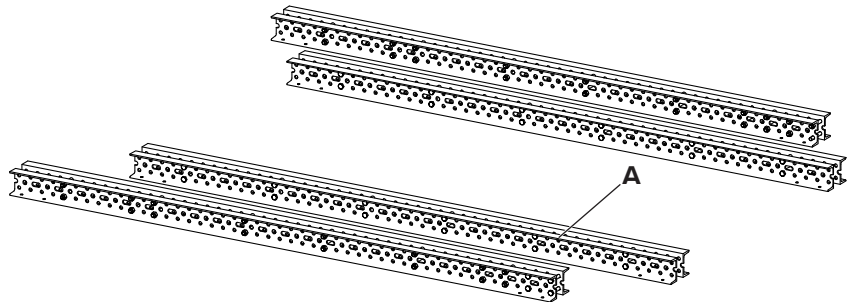
For more information regarding the position of the SCR Platform Beam 0.75 m Rigid and required fasteners refer to the supplied design scheme.

Step 2 Attach the outer IK Waler L (**D**).

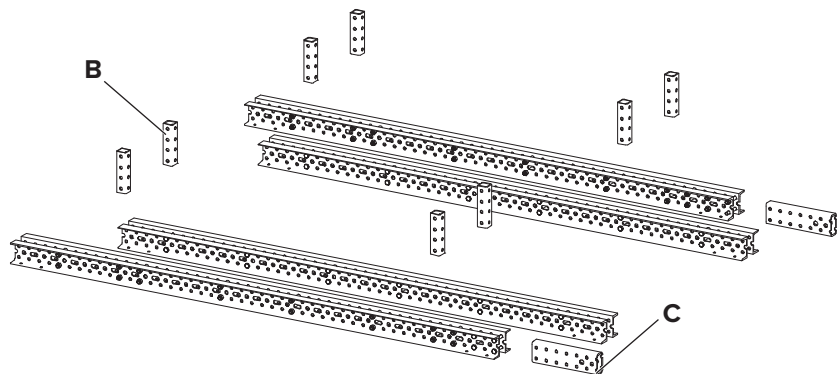
- Step 3** If required, attach the diagonals.
Depending on the size of the SAFESCREEN G2 unit, there might be diagonals or additional stiffening members required for lifting the unit up from the horizontal. If the design scheme allows for, these diagonals or members might be removed to facilitate movement on the platforms. If so, the diagonals have to be re-fitted before lifting the unit from the building and putting it back into the horizontal
- Step 4** Attach the platform (**C**) as per the supplied design scheme.
Platform type may vary depending on the type of vertical members. For the different platform options see page 127.
- Step 5** Attach the cladding of the cantilevered platform. The cantilevered platform cladding is built separately following the sequence of the relevant type of cladding.

Loading platform

- Step 1** On a flat and level surface, position the timber bearers to support the loading platform.
- Step 2** Position the primary beams (IK Waler L, **A**) as per the supplied design scheme.

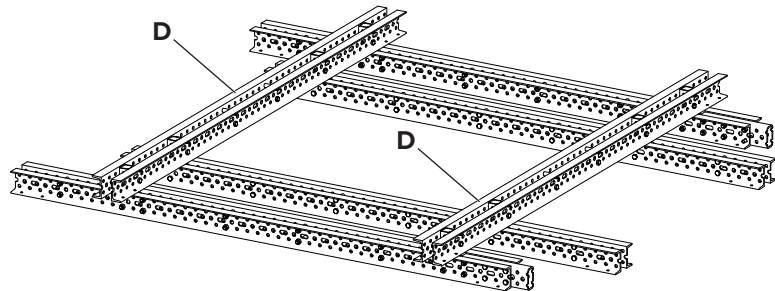


- Step 3** Attach the required quantity of the SCF 60 Cross Connector L (code:612210, **B**) and secure each using the CT_M16_04 per connection.

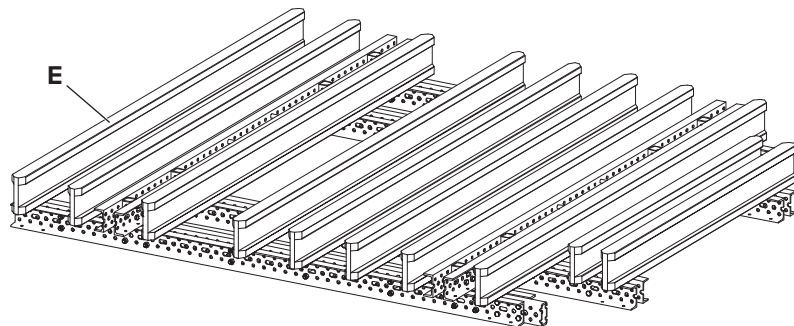


- Step 4** Attach an IK Waler Connector L 25 (code:608445, **C**) to the end of both outer primary beams (**A**) using 4no. CT_M16_04 or CT_S_01 per connection.
Note that to the IK Waler Connector L 25 is only used to attach the loading platform to an IK Waler L. To attach a loading platform to an IK Waler M an IK Waler Connector Flex L (code:608490) is required.

- Step 5** Position the secondary beams (IK Waler L, **D**) on top of the primary beams (**A**) as per the supplied design scheme. Secure to all positions of the SCF 60 Cross Connector L (**B**) using the CT_M16_04 per connection.



- Step 6** Place the H 20 Beams 2.90 m* (code:581792, **E**) on top of the primary beams (**A**) and secure each connection using a H 20 timber beam clamp (code:568048).



* In some regions a T200 Beam 3.00 m (code:717230) and T-bolt (code:006354) are used.

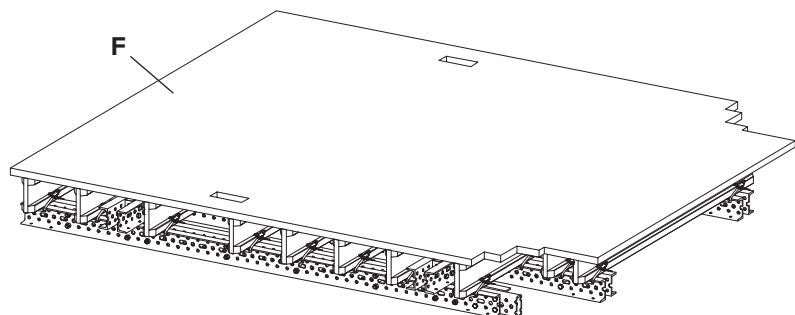
- Step 7** Use plywood (**F**) cut to suit to form the decking of the loading platform. Secure to the H 20 Beams (**E**) using screws.



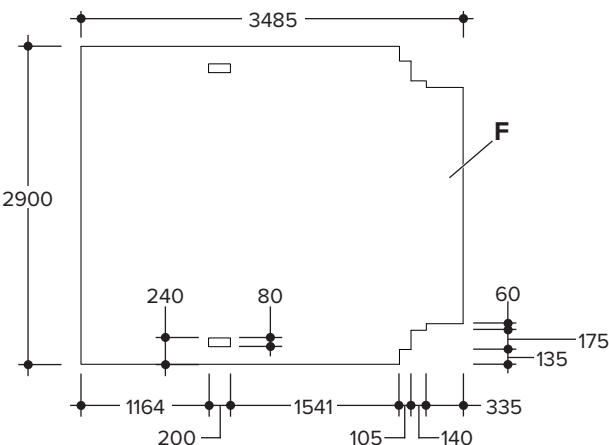
Ensure the platform base (beam setup) is square before fixing the plywood.



To ease the assembly of components later on, the plywood used for the decking should be installed with all the required cut-outs.



Plywood dimensions for a typically sized loading platform are shown below:



The decking of the loading platforms must be done using a double layer of plywood. High loads caused by wheel movement are likely to occur. Plywood sheet joints must be staggered.

Step 8 Attach the required SCR Cladding Panels (**G**) to each other and to the decking of the loading platform.

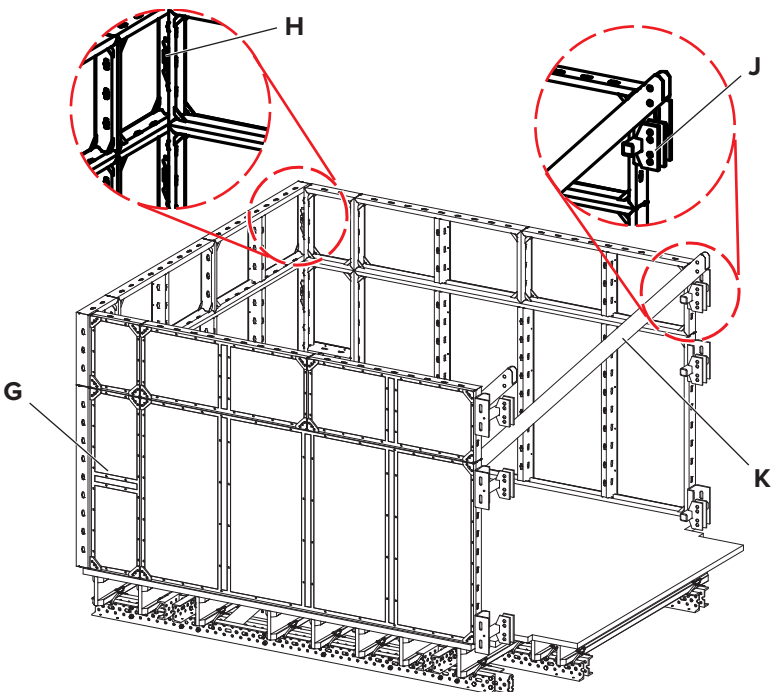


For more information regarding the connections, refer to the supplied design scheme specific to the job requirements.

Step 9 Secure the SCR Cladding Panels at the corners using the SCR Inner Corner Panel Connector (code:611755, **H**) at the positions shown in the supplied design scheme. Secure using 2no. CT_M20_03 per connection.

Step 10 Attach the SCR Panel Connector M (code:611680, **J**) as per the supplied design scheme. Secure using 2no. CT_M20_03 per connection.

Step 11 Attach the diagonals (**K**) specified on the supplied design scheme to the primary beams (**A**) and secure using 2no. CT_M20_07 or CT_S_02 per connection



The typical assembly is now completed.

Attaching the loading platform to the SAFESCREEN G2 unit

To attach the loading platform to the SAFESCREEN G2 unit, the unit must be positioned on top of suitable temporary support and with the cladding facing upwards. Operatives must be able to have access to the underside of the SAFESCREEN G2 unit.

It may be required to use additional temporary support to prop the rails on the positions where the loading platform will be attached.

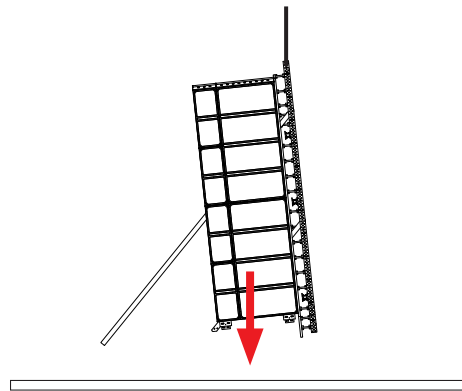
For more information regarding lifting the SAFESCREEN G2 units see page 141.

In the following sequence it is assumed that the SAFESCREEN G2 unit is prepared to receive the loading platform, as described above.

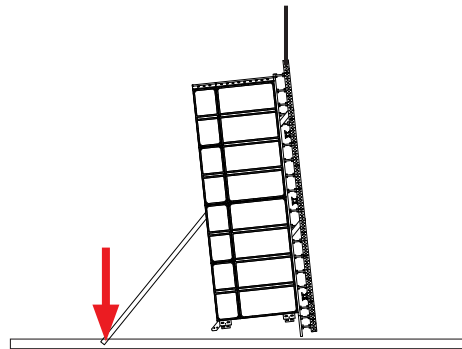
Step 12 Attach the crane slings to the end of the primary beams of the loading platform.

Step 13 Lift the loading platform in a controlled manner.

Step 14 Position the loading platform above the SAFESCREEN G2 unit.



Step 15 Lower the loading platform until the diagonals can be attached to the rail.



Step 16 Secure the diagonal using the required fasteners (typically CT_S_02 or CT_M20_07).

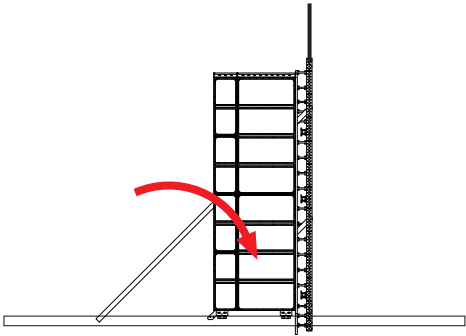


The fasteners required to secure the diagonals vary depending on the IK Waler used to form the rails, refer to the supplied design scheme.



Use only one fastener per diagonal to connect the diagonals to the rails and do not securely tighten the fasteners to allow for the loading platform to rotate around this connection.

Step 17 Lower the platform in a controlled manner, so that the loading platform can rotate around the connection of the diagonals to the rail, until the opposite end of the loading platform is resting on top on the rail.



Ensure that all connection positions are properly aligned.

Step 18 Attach all the IK Waler Connector L 25 (code:608445) to the rails of the SAFE-SCREEN G2 unit.
Note that the IK Waler Connector L 25 is only used to attach the loading platform to an IK Waler L. To attach a loading platform to an IK Waler M an IK Waler Connector Flex L (code:608490) is required.

Step 19 Tighten the fasteners used to connect the diagonals to the rail.

Step 20 Add the rest of the fasteners required to secure the connection between the diagonals and the rail.

Step 21 Attach the SCR Panel Connector M (code:611680) to the rail using the required fasteners.



The fasteners required to secure the SCR Panel Connector M (code:611680) vary depending on the IK Waler used to form the rails, refer to the supplied design scheme.



Ensure that the loading platform is securely attached to the SAFESCREEN G2 unit before releasing the crane slings.

Step 22 Release the crane slings from the loading platform.

10 Lifting and transportation

10.1 General notes on lifting and transportation

Comply with the following points when selecting the attachment points:

- Special requirements of the components in regard to transport and lifting
- Secure attachment
- Loads permitted according to the operating instructions for the lifting accessory

Comply with the following instructions when lifting components by crane:

- It is essential to always observe and comply with the maximum working load limit (WLL) of the lifting accessories.
- The lifting accessories shall be used only to lift loads expressly permitted by the operating instructions.
- Before beginning lifting, always verify that the lifting accessory is properly attached to the load.
- Loose parts shall be removed and transported in suitable containers. Parts remaining on the components to be lifted shall be secured to prevent them from falling off.
- Never step onto components when lifting or lowering them.
- Before beginning lifting, always verify that the lifting accessory is properly attached to the load.
- Never allow persons on the components being lifted.
- The lifting gear must be moved gently, without jerking,
- When using lifting gear to assemble wall and column formwork, the lifting accessory shall not be released until the props/supports are in place.
- Diagonal pull shall be avoided.
- Loads shall be guided such that they cannot collide with other components.
- When there is a strong wind, ropes have to be used to guide the components to be lifted, or crane operation may have to cease.
- Persons shall never stand below the components being transported.

10.2 Lifting

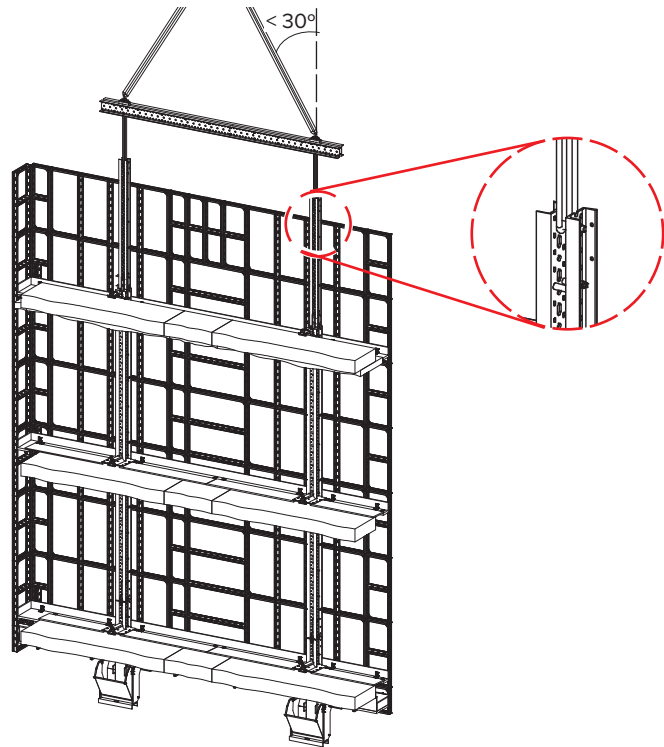
Mechanical lifting should only be carried out by competent and trained persons.

Only persons engaged in the lifting and moving should be allowed near the operation when mechanical lifting must be carried out.

- Use adequate forklifts
 - Do not lift objects / assemblies longer than 7.00 m with forklifts.
 - Ensure floor is level and even.
 - Transport object in a controlled and safe manner.
- Use chains / slings when crane lifting / transporting pre-assembled frames, platforms and fully assembled units.
- Ensure lifting straps are of sufficient length and of adequate capacity.
- Check the weight of the lifted item and working load limits of lifting devices.
- Ensure the lifting pathway is clear for unit lift.
- Attach crane slings to the designated lifting points as per the supplied design scheme.

- Avoid fixing slings around the rails or other sharp edges, as this can cause damage to the channels and / or the slings.
- Avoid resting slings against the edges of the panels during lifting.
- If required, use a lifting beam.
- Do not exceed a 30° angle pitch for the crane slings.
- Ensure that the load is stable and secure at all times during crane lifting / transporting operations.

All relevant regulation regarding mechanical lifting must be adhered to at all times.



10.3 Transportation

Due to the UK's Road Regulations, the maximum unit width that can be transported on the road without an escort vehicle is 2.90 m.

There are few different ways the SAFESCREEN G2 units can be loaded to comply with this regulation:

- Fixed units up to 2.90 m:
In general, units with fixed platforms and panels up to 2.90 m in width can be delivered to site as built.
- Fixed units over 2.90 m:
These can be supplied flat packed in pre-assembled elements such as vertical members, platforms, panels, etc.
- Expandable units:
Folding platforms require folding and securing to the frame. Perforated panels are required to be fully closed. This type of unit, once fully closed, must not exceed 2.90 m in width.
- Loading platforms:
These can be supplied flat packed in pre-assembled elements such as frames, platforms, panels, etc.



The road regulations may vary depending on the region. Refer and comply to the relevant local regulations.

10.4 Delivery / return typical check list

10.4.1 Checking Procedure

Material deliveries are to be checked on arrival to site / place of destination as well as before each use to ensure that they are in good condition and functioning correctly.

The inspection includes a visual check and functional check of all components and check of assembled parts, according to relevant assembly drawings.

Checks must be done by authorised personnel only.

Highlight and report any deviation, at any stage, to the senior staff member. Senior staff must take appropriate action in regards to any deviation reported.

The following is a typical checklist. Job specific checklist may vary.

10.4.2 Check List (Typical)

Inspected Unit (refer to SAFESCREEN G2 assembly card, if attached):

Unit type: _____

Unit no.: _____

Drawing no.: _____

Item: _____

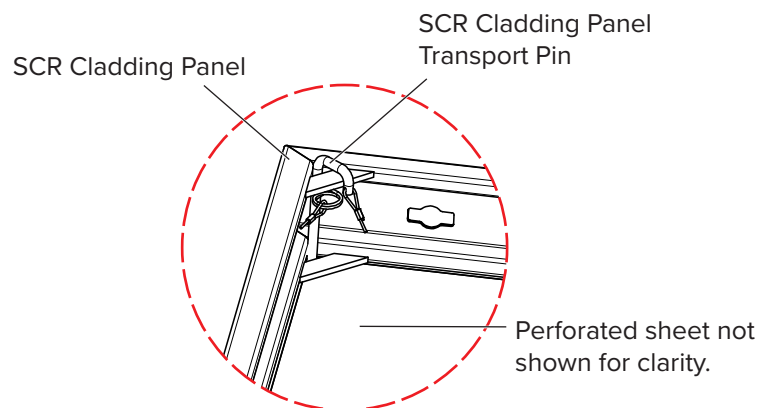
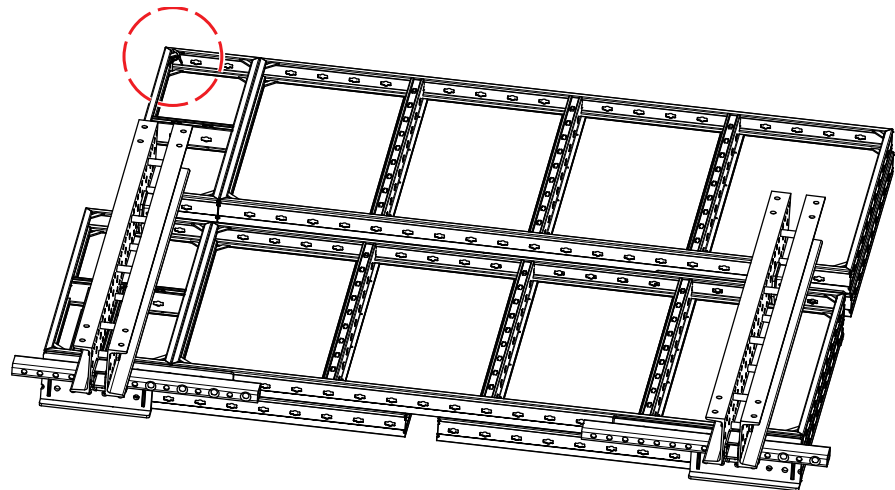
Visual Inspection:

- ☐ All parts are completed.
- ☐ Parts do not show any wear or outer deformation.
- ☐ Parts do not show any mechanical damage.
- ☐ Part’s welding is without apparent external cracks.
- ☐ Moving parts (rotating / sliding) show ease of movement.
- ☐ Unit is free of concrete residuals.

Notes:

10.5 Securing the extendable units

During transportation and to prevent the extendable units from accidentally opening, the SAFESCREEN G2 unit must be secured using the SCR Panel Transport Locking Pin (code:612124). The SCR Cladding Panel Transport Pin is inserted in the corner of the fixed panels and secured using the safety clip. The extendable panels must be fully retracted, and the pin must protrude through the opening of the corner of the extendable panels.



11 Installing the SAFESCREEN G2 units

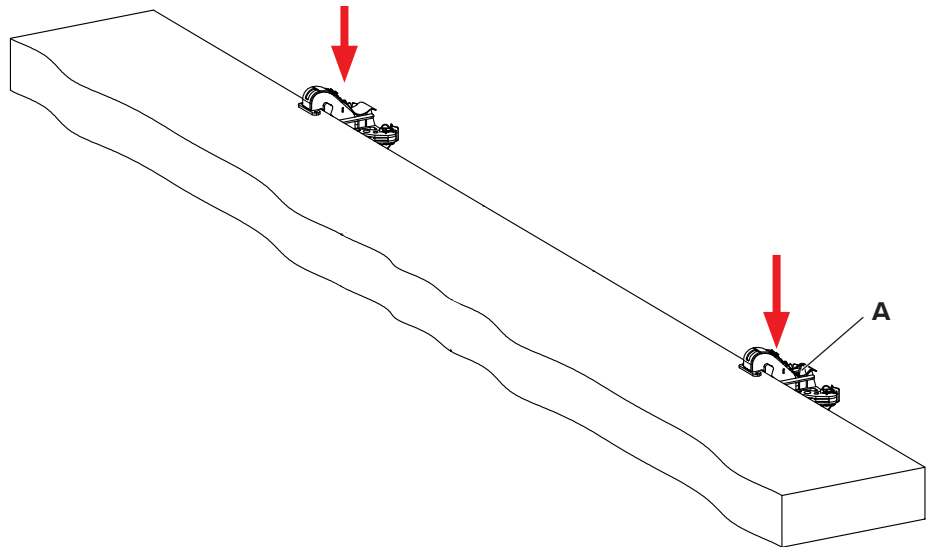
Installation of a SAFESCREEN G2 unit starts when the unit is on-site and pre-assembled in accordance with the agreed scope. The SAFESCREEN G2 unit installation is complete when it is safely secured to the existing concrete structure and all gaps are properly closed as per agreed scope.

Personnel involved in this operation must be competent, wear the appropriate PPE and collective and/or individual measures against falling from height must be in place where required.

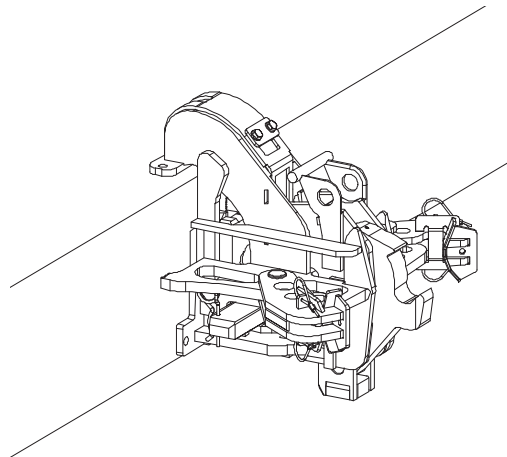
Note that for illustration purposes the instructions may show only one rail, however the instructions are applicable for both rails. Moreover, the installation is shown using SCR Slab Edge Bracket (code:611170), however these steps apply to other types of brackets as well.

Phase 1 – Preparations on the concrete structure

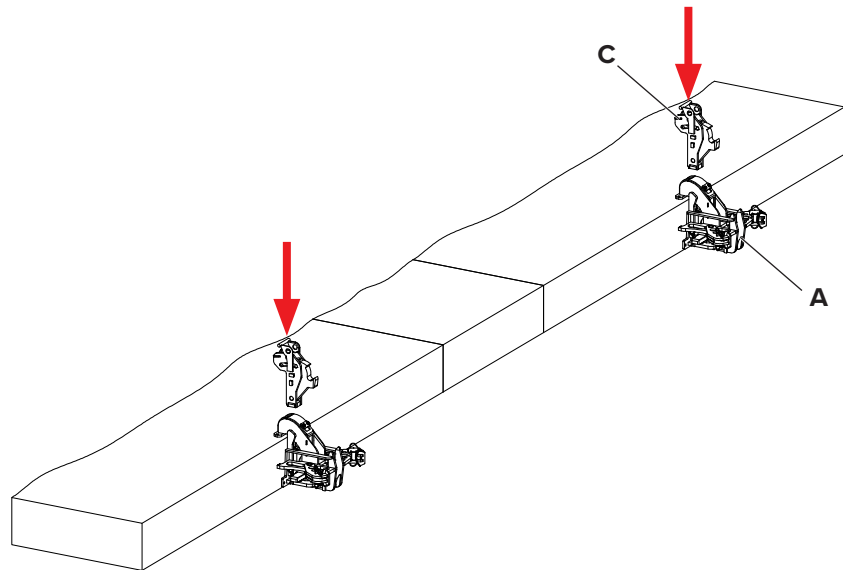
- Step 1** Fence off the area below the area where the SAFESCREEN G2 unit is to be installed.
- Step 2** Ensure that the anchors are installed in the concrete structure and that they are vertically aligned, within the allowable tolerances, as per the supplied design tie scheme.
- Step 3** Install 2no. levels of the specified climbing brackets (**A**).



- Step 4** Install the SCR Slab Edge Bracket Securing Bar (code:611230, **B**).



Step 5 Install the Bracket Claw Units (code:611115, **C**) in the climbing brackets (**A**) at Level L-1.



Step 6 Check horizontal level of the Bracket Claw Units (**C**).



Step 7 If required, install the height adjustment components to adjust the level of the Bracket Claw Units (**C**) and level the Bracket Claw Units, see page 55.

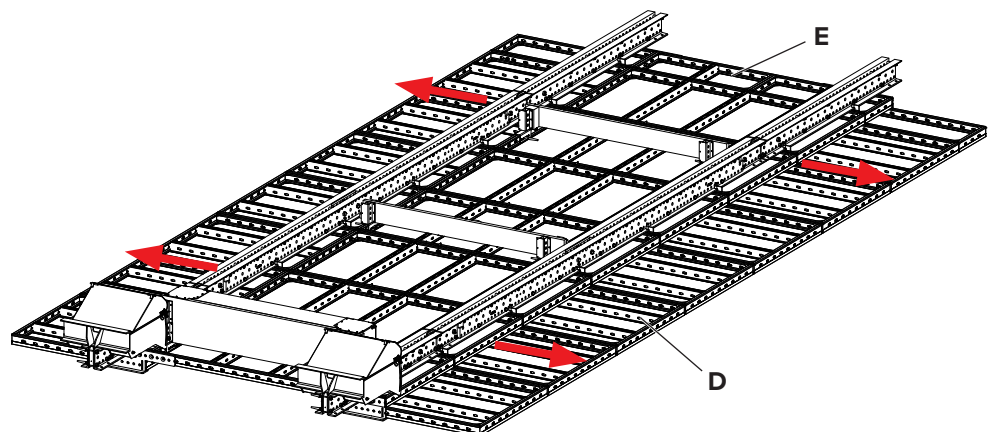
- SCR Slab Bracket Height Adjustment (code:611205) for the SCR Slab Edge Bracket (code:611170)
- SCF 60 Wall Bracket Height Adjustment (code:611210) for the SCF 60 IK Waler Bracket (code:611710).

Phase 2 – Preparing the SAFESCREEN G2 unit

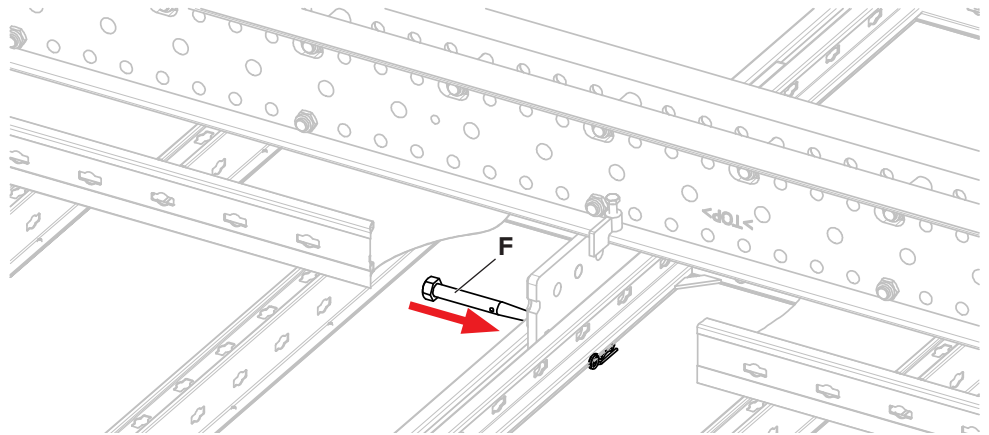
Steps 8–12 are for extendable width SAFESCREEN G2 units only.

Step 8 Remove the safety pins used to secure the SCR Cladding Extension Panels (**D**) to the SCR Cladding Panels (**E**). Store the safety pins for later use.

Step 9 Slide the SCR Cladding Extension Panels (**D**) out.

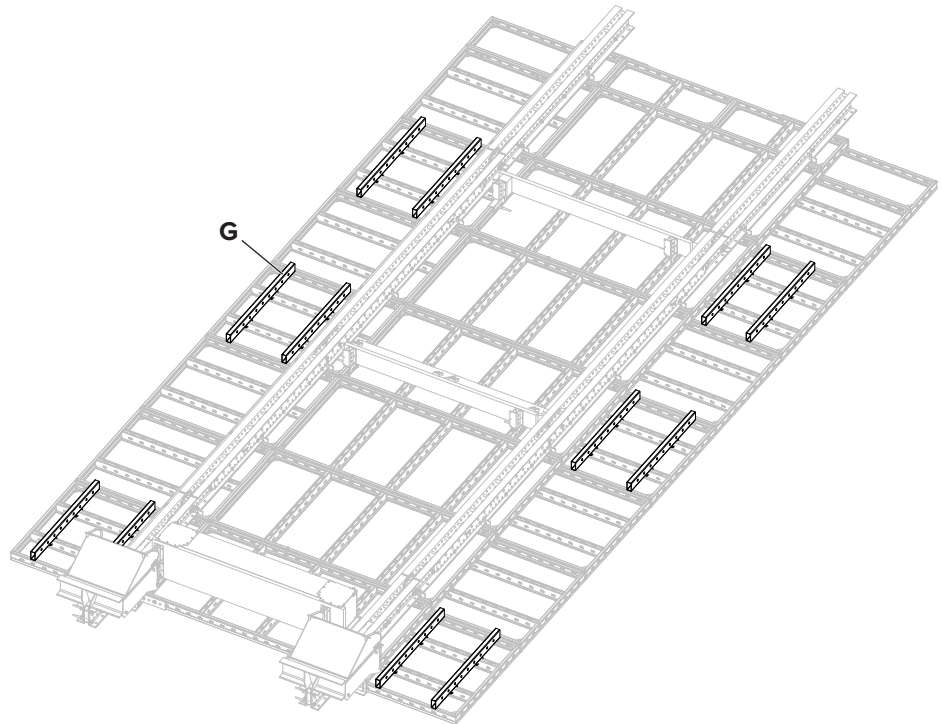


- Step 10** Secure the SCR Cladding Extension Panels (**D**) in position using the CT_S_02 connection type (**F**).

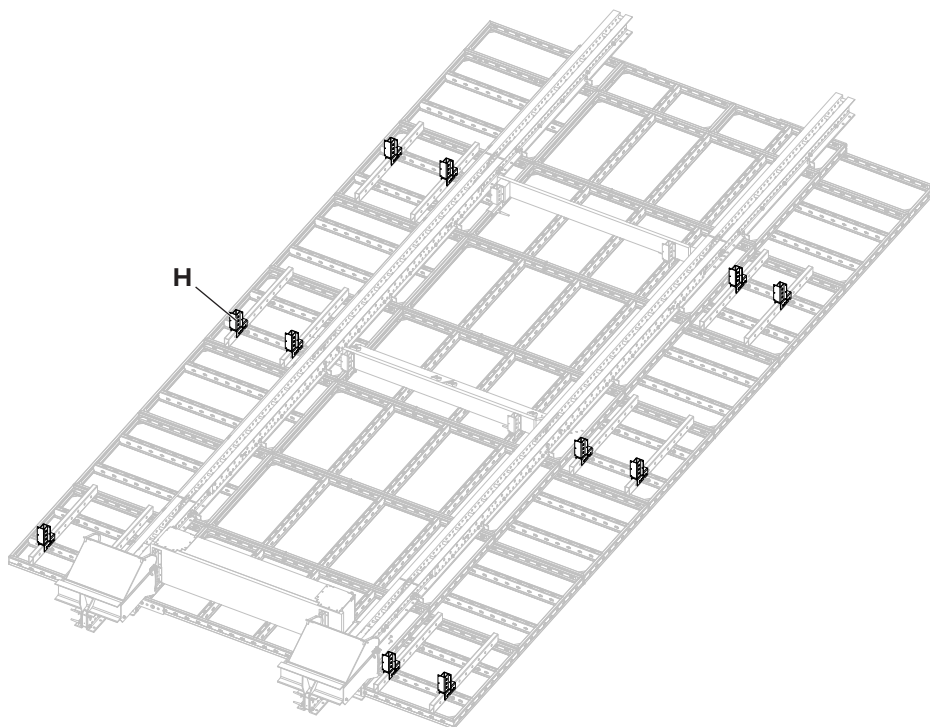


- Step 11** Attach the SCR Panel Ribs where required.

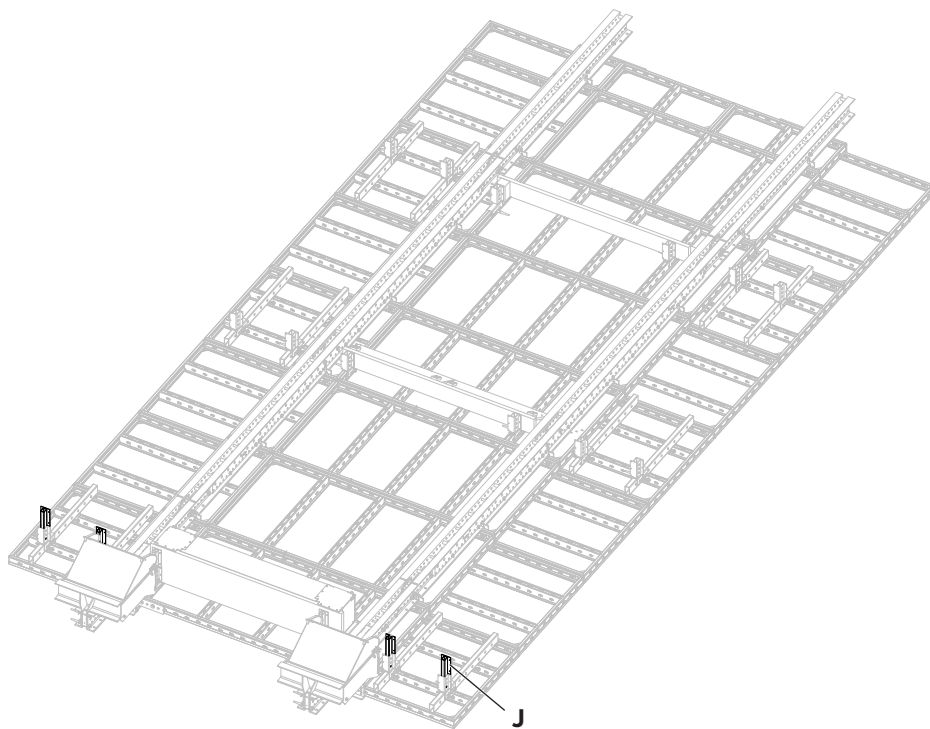
- Step 12** Attach the SCR Platform Bracket Adaptors (**G**) where required.



Step 13 Attach the SCR Panel Platform Bracket (code:611580, **H**). Secure as per design scheme.

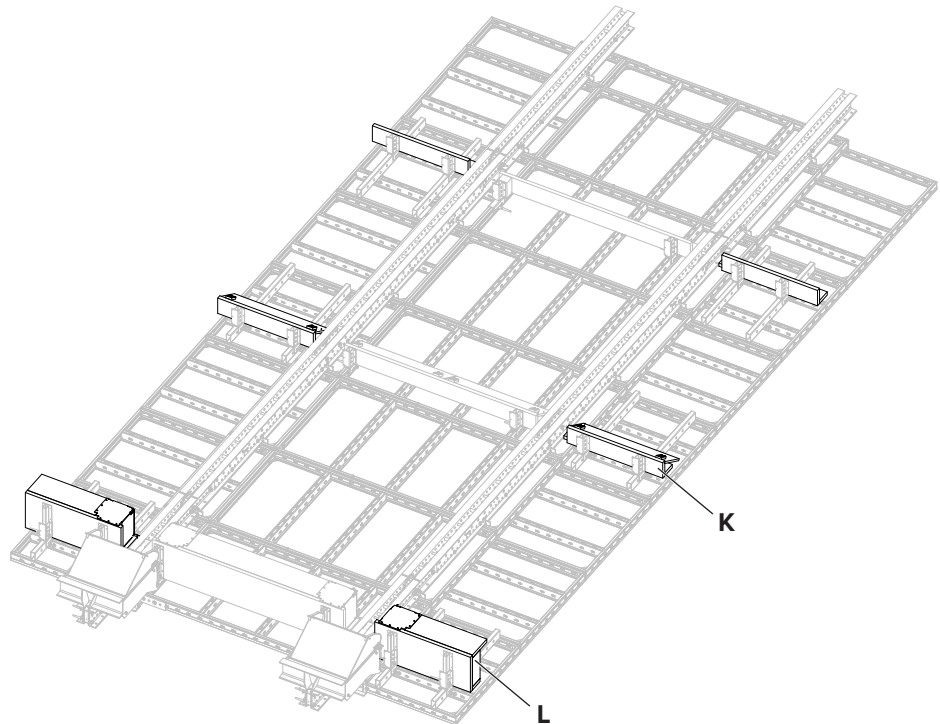


Step 14 Attach the SCR Panel Platform Bracket Extension (code:612239, **J**). Secure as per design scheme.



Step 15 Build the wing platforms separately.

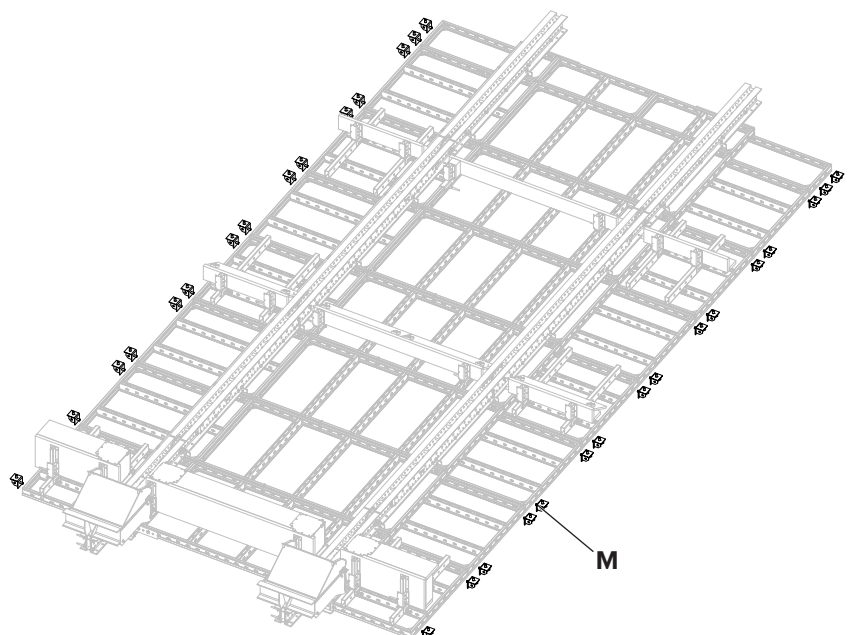
Step 16 Attach the wing platforms (**K**) and the wing safety box level (**L**) as per the supplied design scheme.



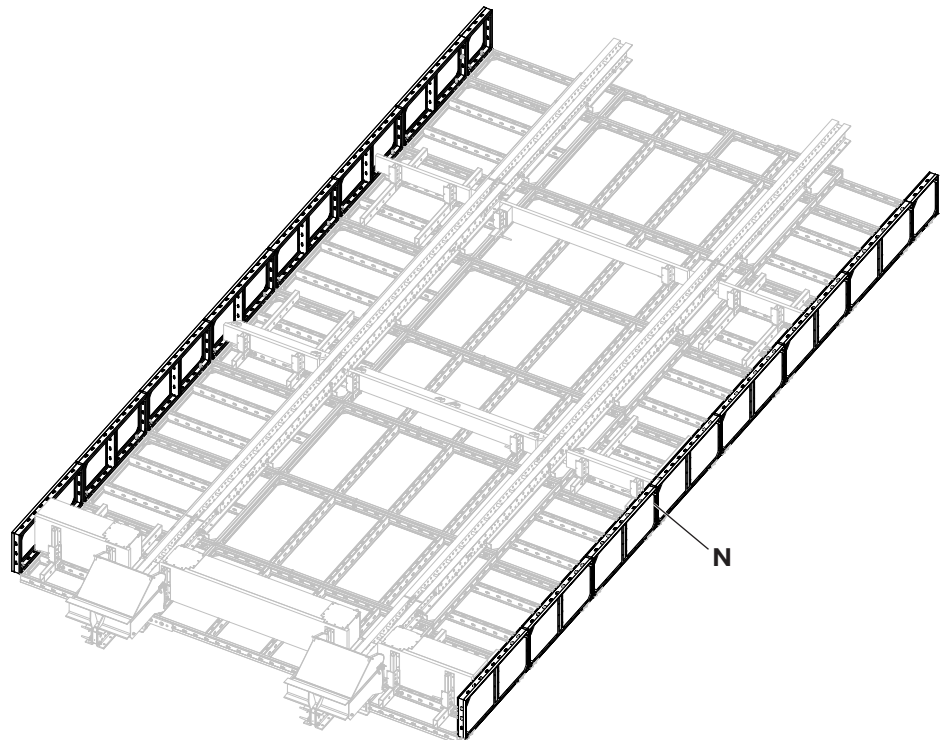
To speed up the assembly, the platforms, platform brackets with the platform brackets included, could be built prior to the assembly and be transported to the site as a pre-assembled unit.

Step 17 If returns are required on the SAFESCREEN G2 unit, attach the specified return connectors (**M**).

- SCR Return Panel Connector adjustable (code:611620), SCR Return Panel Brace (code:612245) and 2no. SCR Return Panel Brace Connector (code:612240).
- SCR Return Connector 90° (code:611575).
- SCR Return Connector 45° (code:611615).



Step 18 Attach the return panels (**N**) as per the supplied design scheme.



Step 19 Attach the SCR Cladding Panel T-Spacers (code:611548, **K**) where required.

Step 20 Attach the rubber seals where required.



To save time, rubber seals can be attached after the unit is installed on the building.

Phase 3 – Lifting the unit

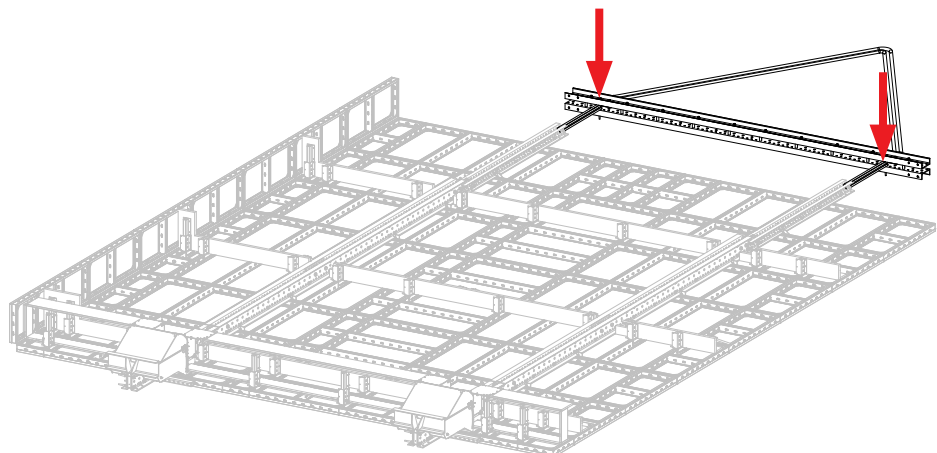


Before commencing the lifting of the SAFESCREEN G2 unit, ensure that:

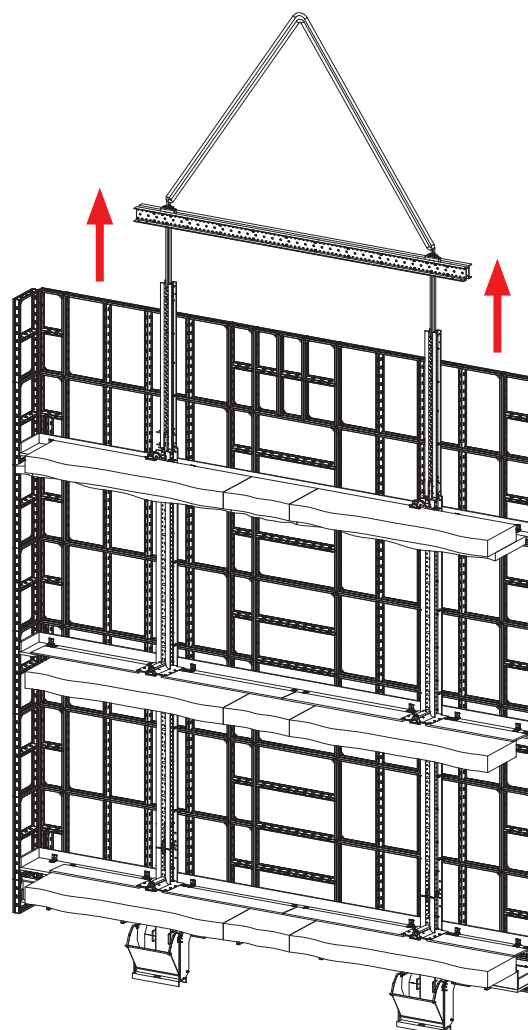
- The unit is clear of debris and loose materials.
- All traps are secured in the open position.
- All concrete slab edges are free of protruding items.
- All extendable panels are secured and cannot slide in or out.

Step 21 Attach a suitable spreader beam to the SAFESCREEN G2 unit.

Step 22 Attach the crane slings to the spreader beam.



Step 23 Lift the SAFESCREEN G2 unit in a controlled and safe manner.



Ensure that the during the rotation of the SAFESCREEN G2 unit, from the horizontal to the vertical position, no damage to the material occurs.

If trestles or other supports are used, ensure that the SAFESCREEN G2 unit cannot slide off these trestles in an uncontrolled manner.

Phase 4 – Installing the SAFESCREEN G2 unit to the building



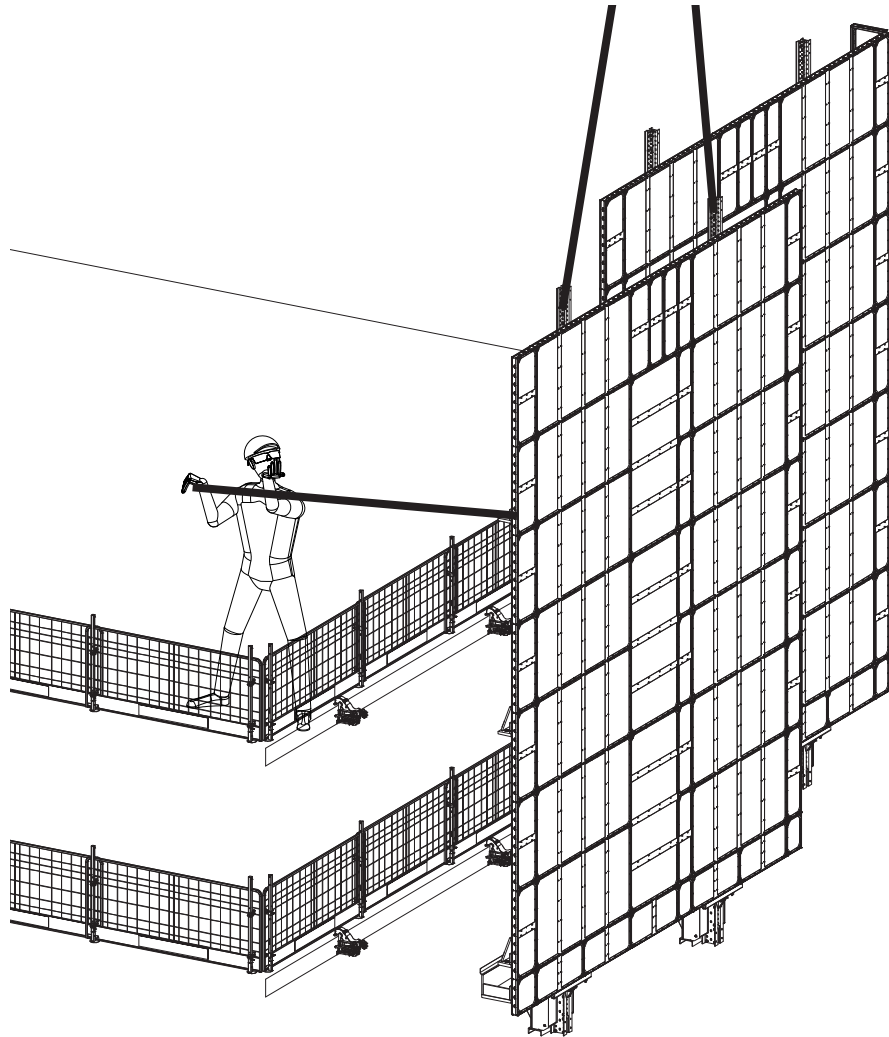
WARNING

Risk of serious injury or death!

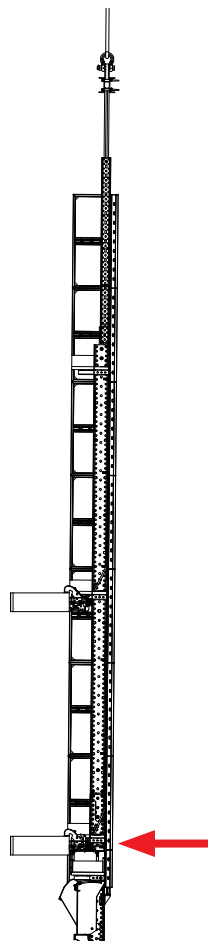
When installing or removing the unit using a crane, ensure that the appropriate collective means of edge protection are in place when working near leading edges. Ensure that the lifting operation is done in a safe and controlled manner.

The temporary edge protection shown refers to a generic assembly/installation sequence. The edge protection may vary depending on the specific job requirements. Refer to the supplied design scheme for more information.

Also, due to the risk of falling objects, the area below the unit should be closed off, operatives should tether loose objects being moved/installed and if possible, a safety net below the unit should be in place.

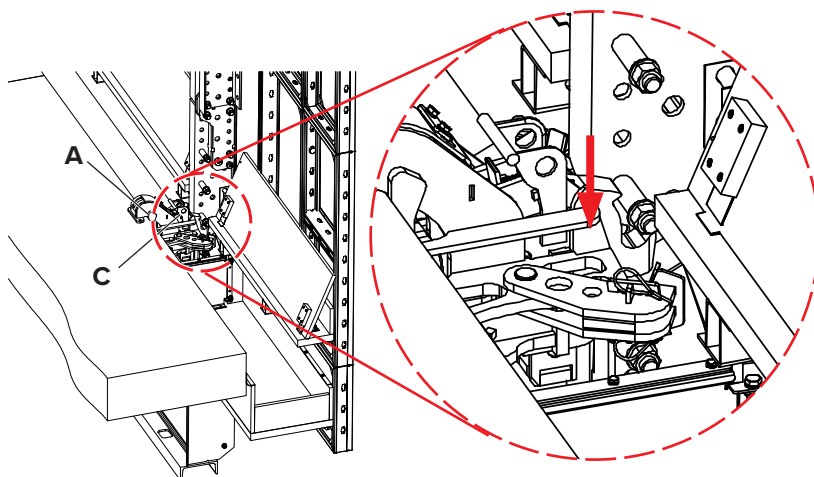


- Step 24** Position the SAFESCREEN G2 unit against the lower level of the climbing brackets (**A**). Note that the SAFESCREEN G2 unit will be at a slight angle with the bottom part of the unit closer to the concrete structure.

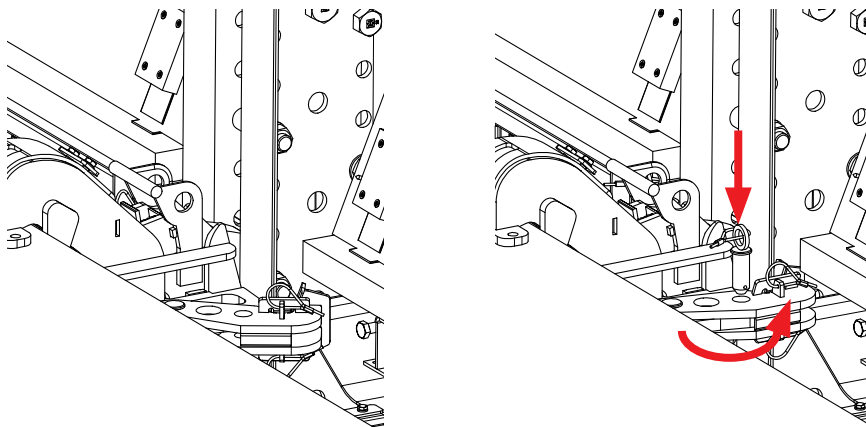


Ensure that the SAFESCREEN G2 unit will be supported by the correct Bolt Sleeve Ø30 (code:611720). The correct supporting Bolt Sleeve Ø30 must be directly above the Bracket Claw Unit (code:611115).

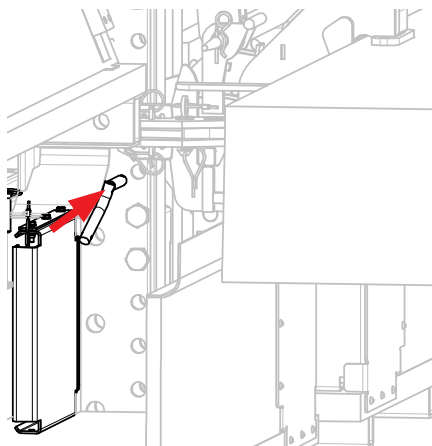
- Step 25** Lower the SAFESCREEN G2 unit so that it rests on the Bracket Claw Units (**C**) of Level L-1 or level L-2 depending on the SAFESCREEN G2 unit.



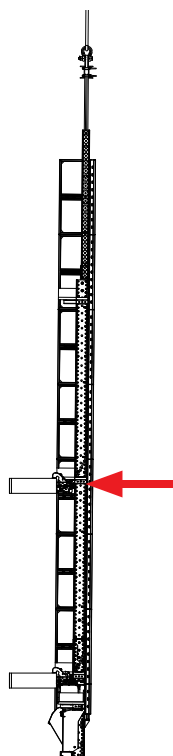
Step 26 Close the claws of the lower level of climbing brackets (**C**) so that the inner flanges of the rails are captured by the claws. Secure using the claw pins.



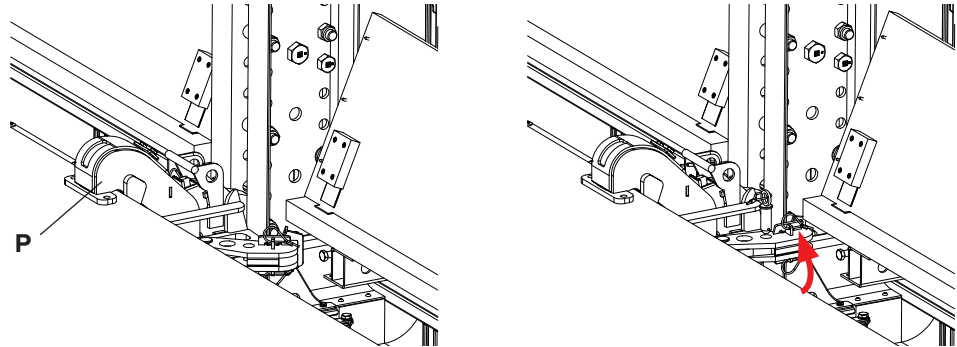
Step 27 Attach the Bracket Claw Locks (code:611380, **N**) on both rails.



Step 28 Pull the upper part of the SAFESCREEN G2 unit so that the inner flanges of the rails can be captured by the claws of the upper climbing brackets (**P**).

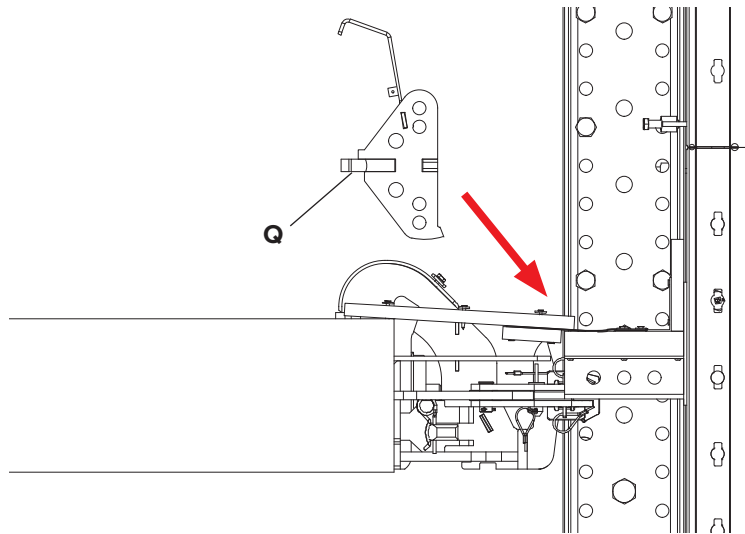


Step 29 Close the claws of the upper climbing brackets (**P**).



Step 30 Release crane slings.

Step 31 Attach the SCR Wind Latches (code:611810, **Q**) if required.

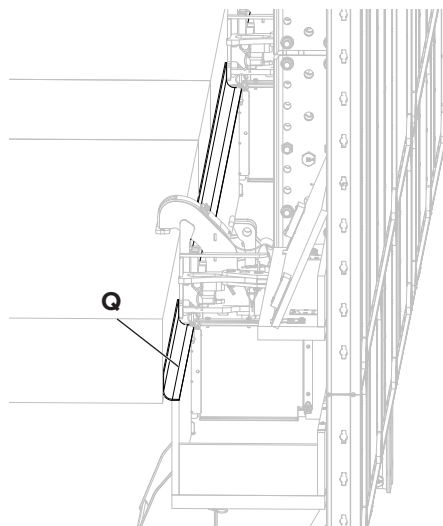


Step 32 Seal the unit by installing/completing the rubber covers as per the supplied design scheme.

Step 33 Seal the SAFESCREEN G2 unit vertically by installing the SCR Sealing Brushes.

Step 34 Close the gap between the safety level platform and the concrete face with 15cm rubber strips (fix using CT_WC_01).

Step 35 Close the gap between the platforms and the concrete slabs by closing the traps (**R**) of the SAFESCREEN G2 unit.



The SAFESCREEN G2 unit is safely installed to the building.

12 Climbing

12.1 Operating the SAFESCREEN G2 unit hydraulically

SAFESCREEN G2 units can be lifted to keep in line with the construction of upper levels, by either guided crane climbing or remote hydraulic self-climbing. The units are secured against the structure at all times with either method.

Using the remote hydraulic self-climbing method, the SAFESCREEN G2 units are lifted in 250 mm increments with 485 mm stroke rams that are positioned on to the climbing brackets and powered by a suitable hydraulic power unit.



For detailed descriptions about the hydraulic-climbing method, comply with the operating instructions for the SCF 60/SAFESCREEN G2 climbing gear.

12.2 Climbing cycle

The following sequence describes the climbing cycle of a typical SAFESCREEN G2 unit. It assumes that SCR Slab Edge Brackets (code:611170) will be used, however if other climbing brackets and climbing brackets ancillary are required, the sequence still applies.



WARNING

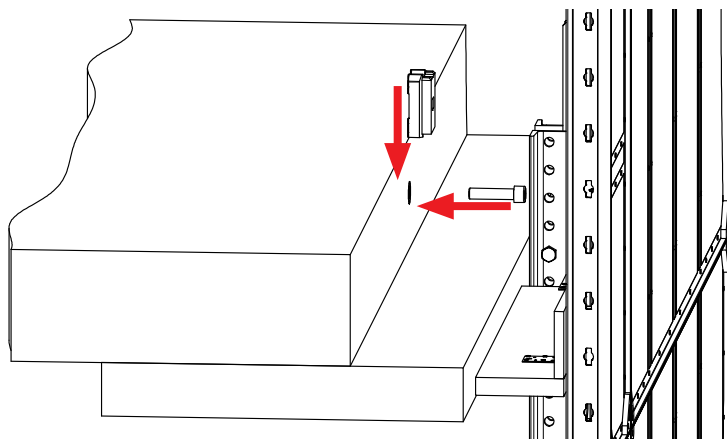
Risk of serious injury or death from falling from height!

Whenever working on a leading edge, an edge protection system is required to be in place. These systems are not mentioned in the following climbing sequence, however a risk assessment plan specific for each site must be done beforehand and all required safety measures must be in place to assist with the climbing operations and their preparations.

Ensure that any edge protection system used will not interfere with the rise of the SAFESCREEN G2 unit.

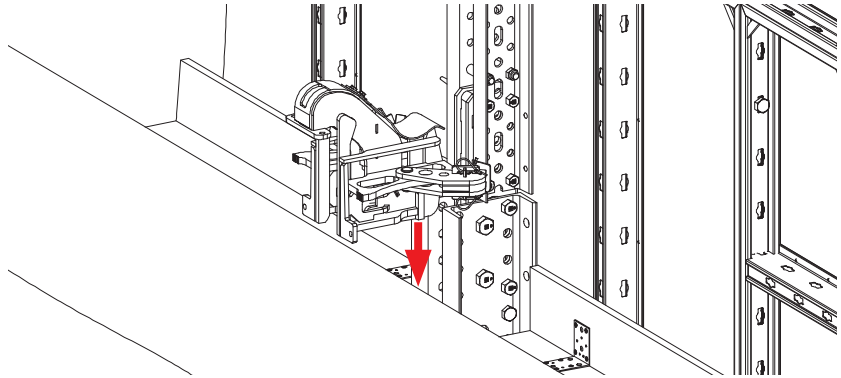
When rising a SAFESCREEN G2 unit, the area around the unit must be fenced off to prevent the risk of being crushed by the equipment.

- Step 1** Install an Anchor Block M24 (code:611220) on all positions of the Anchor Cone M24/DW15 (code:496664) on level L+1. Secure using the Anchor Bolt M24x100 (code:611218).



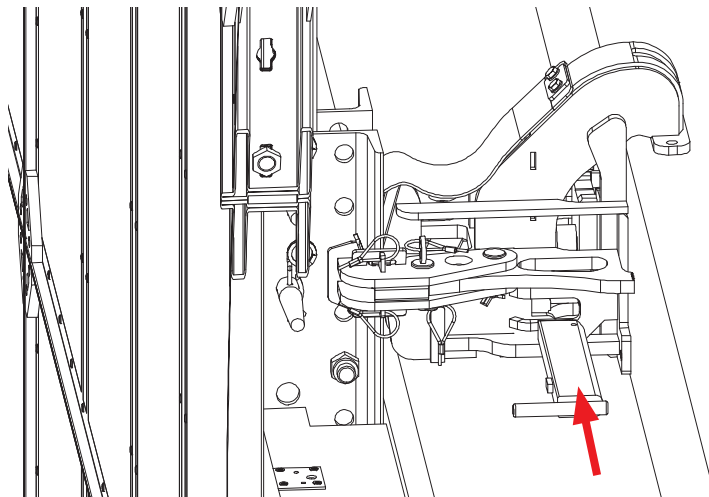
- Step 2** Adjust the horizontal position of the Anchor Block M24 if required.

Step 3 Attach a SCR Slab Edge Bracket to all positions of the Anchor Block M24 on level L+1.

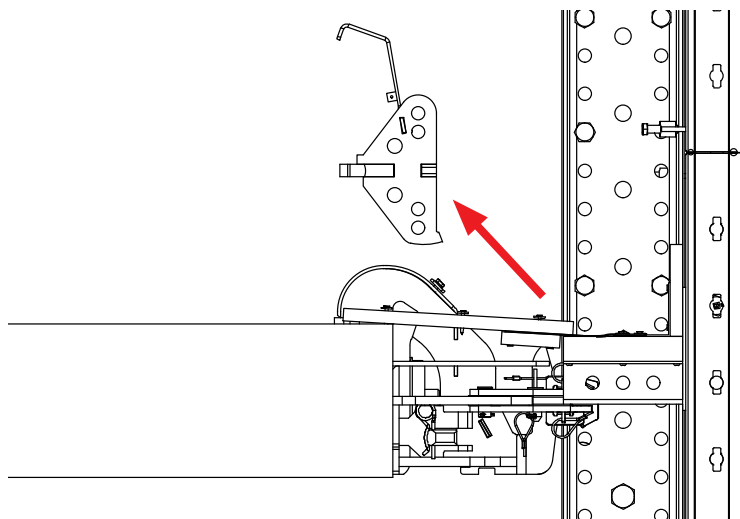


Ensure that the SCR Slab Edge Brackets (code:611170) sit firmly on the concrete and that the Anchor Block M24 (code:611220) does not touch the inside curve of the side plate of the SCR Slab Edge Bracket.

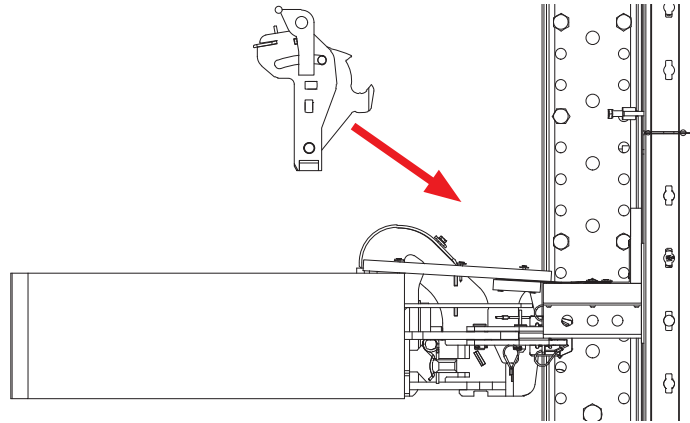
Step 4 Secure all SCR Slab Edge Brackets on level L+1 using the SCR Slab Edge Bracket Securing Bar (code:611230). Secure the SCR Slab Edge Bracket Securing Bar using the safety pin (not shown).



Step 5 Remove the SCR Wind Latches (code:611810) from their position in Level L0.



Step 6 Insert the Bracket Claw Units (code:611115) into the climbing brackets of Level L0.



WARNING

Risk of serious injury or death from falling from height!

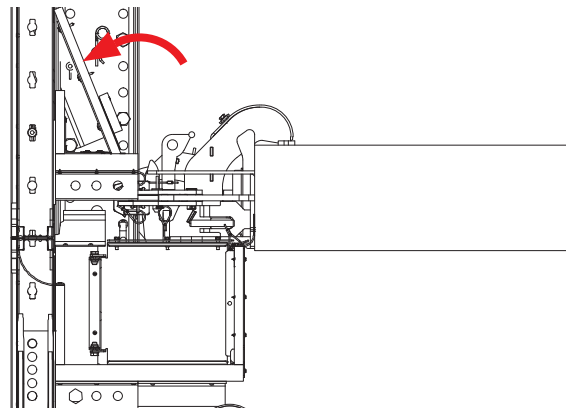
The customer has to ensure that the locking plates of the Bracket Claw Units (code:611115) are properly engaged with the climbing bracket and that they prevent the claw unit from uplift.

The customer has to ensure that the bobbins of the Movable Support Bobbins (code:611820) are in the resting position and can move freely.

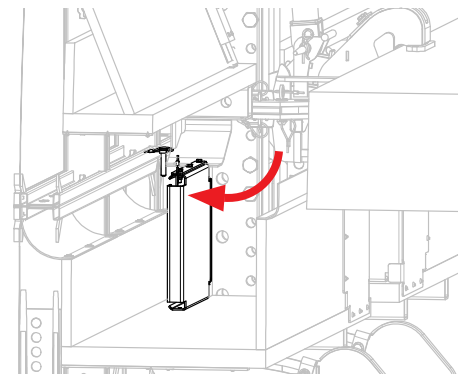
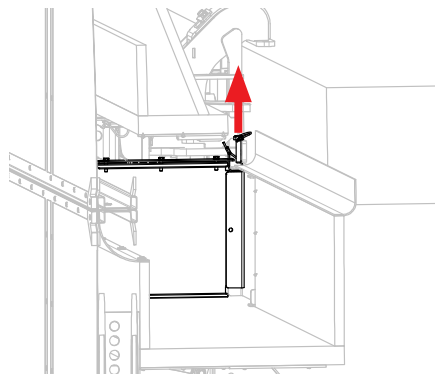
Step 7 If required, attach the SCR Slab Edge Bracket Support (code:611725).

Step 8 If necessary, attach an SCR Slab Bracket Height Adjustment (code:611205) to any SCR Slab Edge Bracket on Level L0 that requires to be adjusted vertically.

Step 9 Open the traps on all levels and secure them against the cladding.

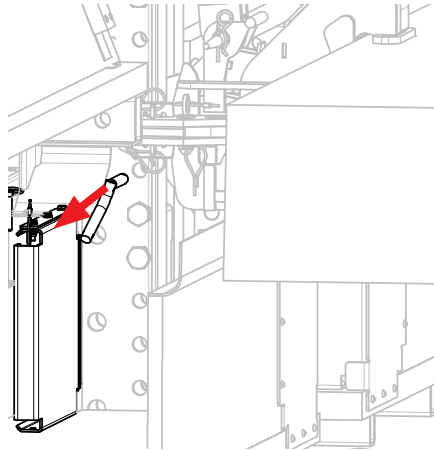


Step 10 If it is required to remove the Bracket Claw Locks (code:611380), remove the safety pin of the SCR Steel Toe Trap 28x28 (code:611675) and rotate against the inner timber toe board of the safety platform level. The SCR Steel Toe Trap 28x28 is now in its "open" position.



Note that the traps should be in the open position during the climbing process.

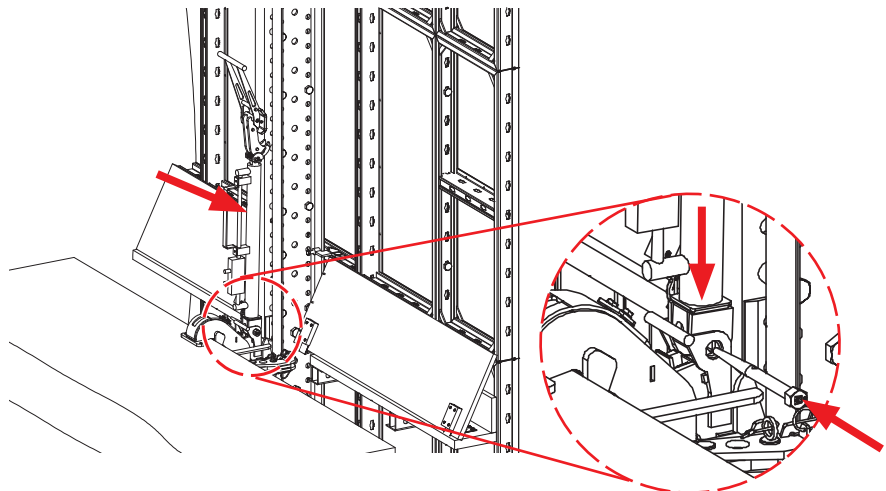
Step 11 Remove the Bracket Claw Locks in Level L-1.



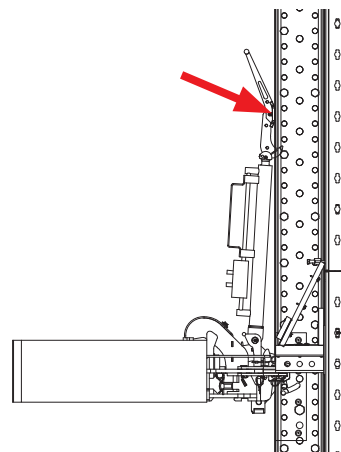
Step 12 Rotate the SCR Steel Toe Trap 28x28 against the SCR Steel Toe Plate 28x28 (code:611626). Secure the SCR Steel Toe Trap 28x28 with the safety pin removed in step 10.

Step 13 Open all the remaining traps and secure.

Step 14 Attach the hydraulic cylinders to all positions of the Bracket Claw Unit of Level L0. Secure the hydraulic cylinders using the Bracket Claw Lock.



Step 15 Attach the heads of the hydraulic cylinders to the rails by engaging the magnets to the climbing rail surface.



Step 16 Connect the hydraulic hoses to the power unit.

Step 17 Connect the hydraulic hoses to the hydraulic cylinders.

12.3 Pre-climbing checks

Before climbing the customer must ensure the following:

- ☐ Ensure SAFESCREEN G2 unit is clear of debris and any loose material.
- ☐ Ensure that the climbing brackets in level L+1 are installed and engaged in the rail.
- ☐ Ensure that all Bracket Claw Locks (code:611380) have been removed from below the climbing bracket in level L-1.
- ☐ Ensure that all current and future leading edges have the appropriate edge protection (on the climbing and adjacent SAFESCREEN G2 units).
- ☐ Ensure temporary or retractable infills (traps) have been removed or are secured in the “open” position.
- ☐ Ensure the lifting pathway is clear for unit lift.
- ☐ Ensure the hydraulic cylinders have been correctly connected to the climbing brackets and rails.
- ☐ Check oil level on the power pack is sufficient.
- ☐ Check there are no leakages on the hydraulic system.
- ☐ Ensure the hydraulic cylinders are fully retracted.
- ☐ Ensure that the SCR Wind Latches (code:611810) from the climbing brackets on L0 have been removed.
- ☐ Ensure that all joints and connections are properly secure.
- ☐ Ensure that all SCR Safety Boxes (code:611450) are empty and can move freely.



During the climbing cycle, the customer must use one operative on each floor to:

- Verify that it is safe to raise the SAFESCREEN G2 unit.
- Monitor the SAFESCREEN G2 unit during climbing for any hazards.
- Ensure that the SAFESCREEN G2 unit is level before and stays level during climbing
- Check for any unexpected sounds and behaviours.
- That the climbing cycle is carried in a controlled and safe way.

Operatives must be in radio contact with each other.

At least one operative must be in control of the emergency stop button of the power pack during the climbing cycle. At any point, if a hazardous situation occurs, this operative must stop the climbing cycle immediately.

Hazardous situations may include:

- Uneven lifting of the hydraulic cylinders
- A trap hazard occurs
- Malfunction of the power pack

This list is not exhaustive and other situations may occur.



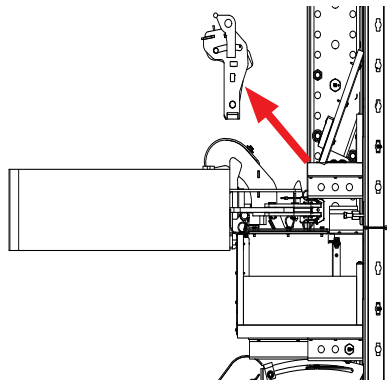
WARNING

Risk of serious injury or death from falling from height!

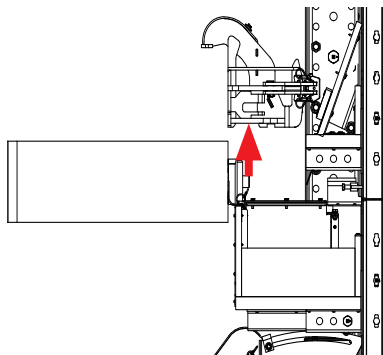
Do not stand on the SAFESCREEN G2 unit during the climbing cycle. All exposed leading edges, current and those occurring during and/or after the climbing cycle, must be closed before the start the climb the SAFESCREEN G2 unit.

Steps 18–22 are for the 3.5 floor units only

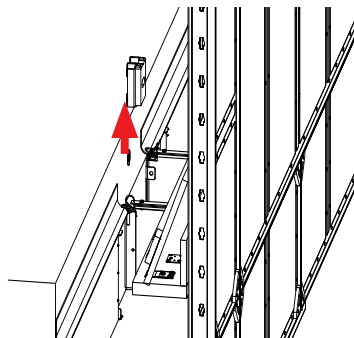
Step 18 Remove the Bracket Claw Unit from all positions of level L-2.



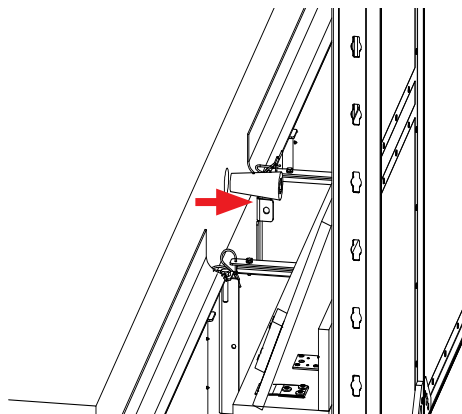
Step 19 Remove the climbing bracket of level L-2.



Step 20 Remove the Anchor Block M24 (code:611220) from all positions of level L-2.



Step 21 Remove the Anchor Cone M24/DW15 (code:496664, **M**) from all positions of level L-2.



Step 22 Close the hole left by the anchor cones on level L-2.



WARNING

Risk of serious injury or death from falling from height!

The customer has to ensure that all leading edges both on the building and on the SAFESCREEN G2 units are protected before, during and after the climbing cycle.

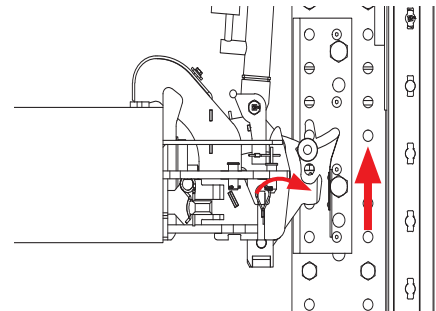
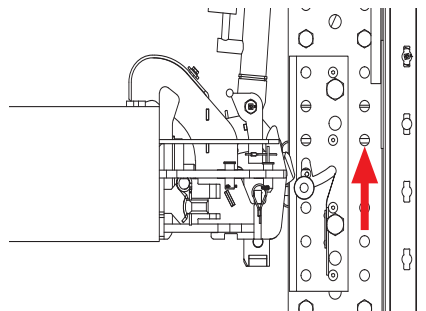
Steps 23–34 are only applicable to the 2.5 floor SAFESCREEN G2 units.

Step 23 Operate the power pack to lift the SAFESCREEN G2 unit. Use either the controls on the panel or the control pendant.

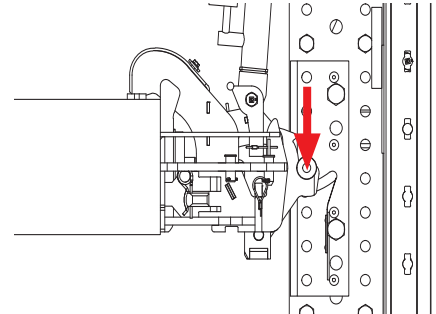
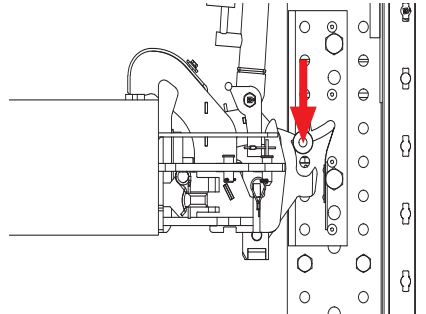


For more information regarding the power unit, refer to the separate operating instructions of the SCF 60/SAFESCREEN G2 climbing gear.

Step 24 Lift the SAFESCREEN G2 unit so that the next bobbins are raised high enough to engage the claw in every Bracket Claw Unit (code:611115) in level L0.

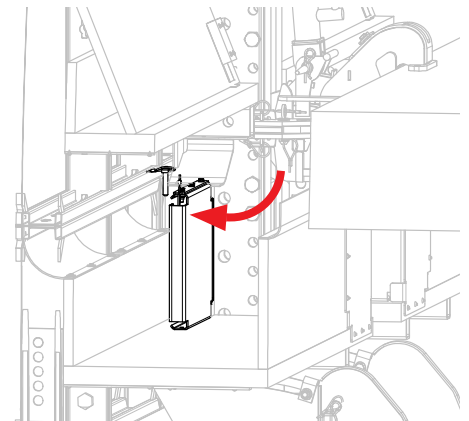
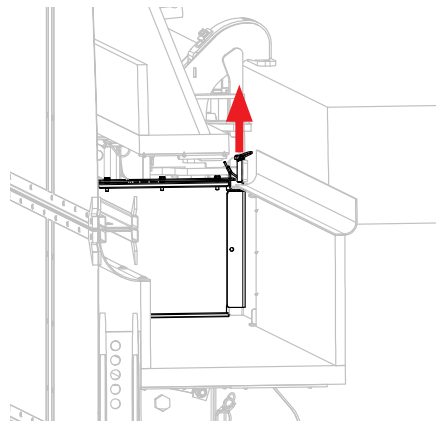


Step 25 Lower the SAFESCREEN G2 unit so that the bobbins are supported by the claws of every Bracket Claw Unit in Level L0.

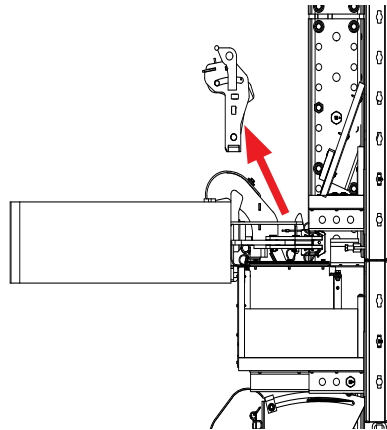


Step 26 Open trap in Level L-1.

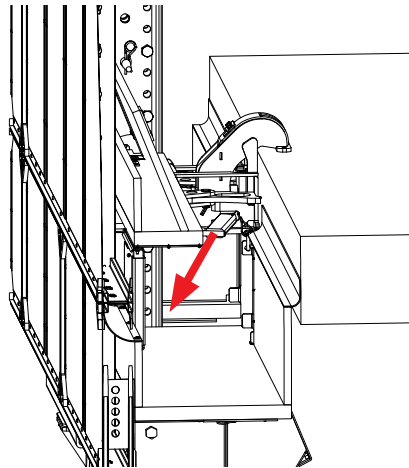
Step 27 Remove the safety pin of the SCR Steel Toe Trap 28x28 (code:611675) and rotate against the inner timber toe board of the safety platform level. The SCR Steel Toe Trap 28x28 is now in its "open" position.



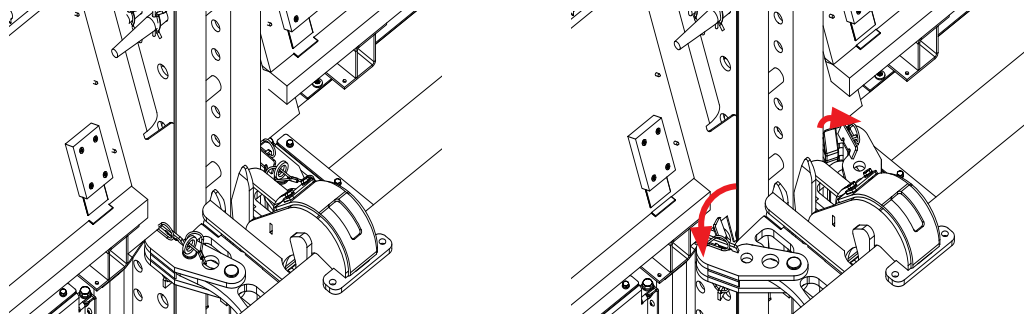
Step 28 Remove the Bracket Claw Unit, including any height adjustment components, from the climbing brackets of Level L-1.



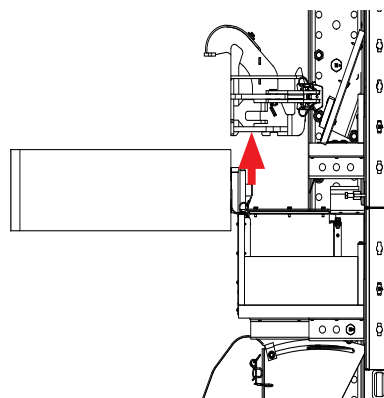
Step 29 Remove the SCR Slab Edge Bracket Securing Bar (code:611230) from all the positions of the climbing brackets on Level L-1. If SCR Slab Edge Bracket Supports (code:611725) were used ,they must be removed as well.



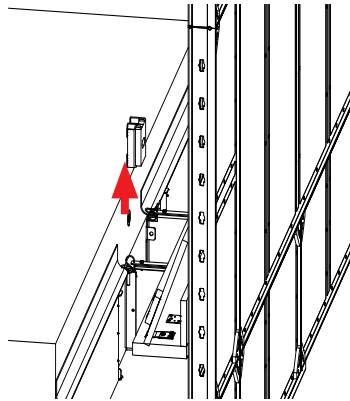
Step 30 Open the sides claws of the climbing brackets on Level L-1.



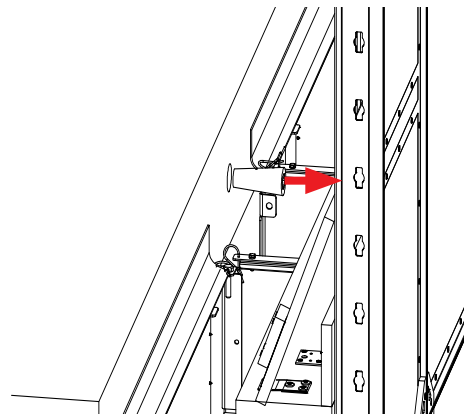
Step 31 Remove the climbing brackets (Q) of Level L-1.



Step 32 Remove the Anchor Block M24 (code:611220) from all positions of Level L-1.



Step 33 Remove the Anchor Cone M24/DW15 (code:496664) from all positions of Level L-1.



Step 34 Close the hole left by the anchor cones on Level L-1.

NOTICE

Risk of damage to the equipment!

Ensure that the SCR Safety Box (code:611450) is empty before continuing and can retract freely.

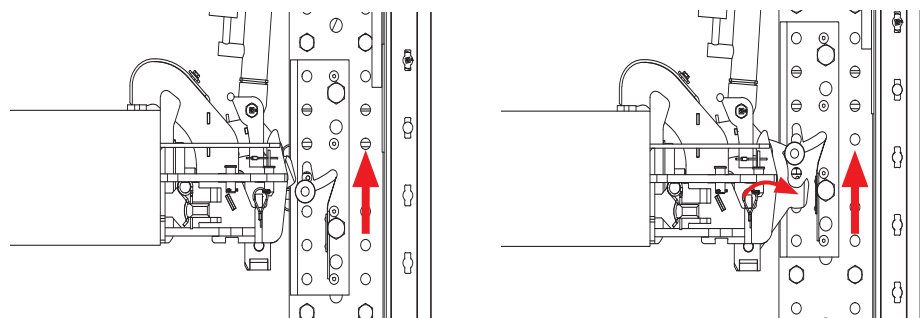
Steps 35–45 are applicable to both the 2.5 floor and to the 3.5 floor SAFESCREEN G2 units.

Step 35 Operate the power unit to lift the SAFESCREEN G2 unit. Use either the controls on the panel or the control pendant.

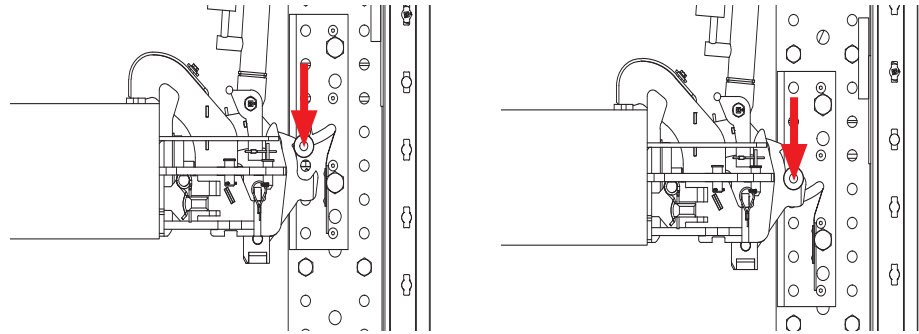


For more information regarding the power unit, refer to the separate operating instructions of the SCF 60/SAFESCREEN G2 climbing gear.

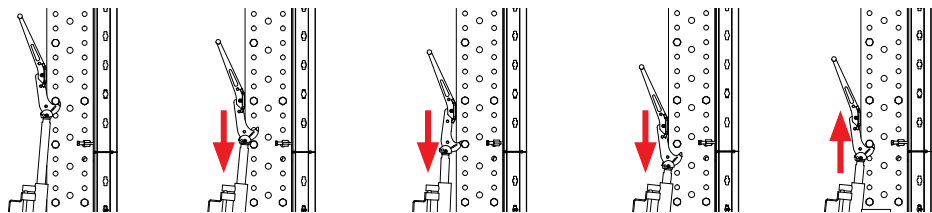
Step 36 Lift the SAFESCREEN G2 unit so that the next bobbins are raised high enough to engage the claws of every Bracket Claw Unit in Level L0.



Step 37 Lower the SAFESCREEN G2 unit so that the bobbins are supported by the claws of every Bracket Claw Unit in Level L0.

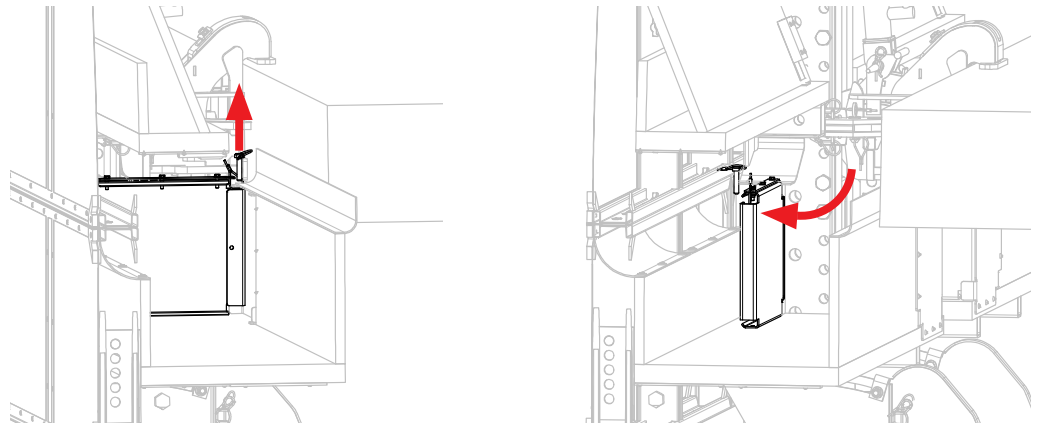


Step 38 Retract the hydraulic cylinders fully and extend so that the heads of the hydraulic cylinders engage with the lowest possible bobbin.

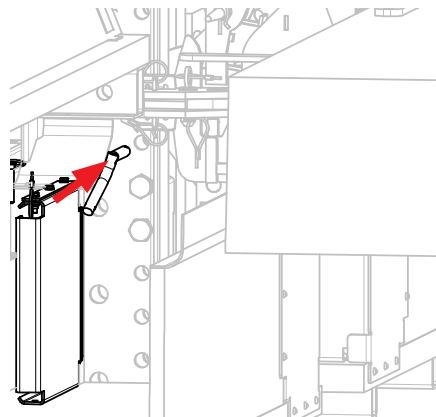


Step 39 Repeat steps 32–35 until the SAFESCREEN G2 unit is at the required position as per the supplied design scheme and that is vertically supported by a designated main support bobbin on Level L-1.

Step 40 Insert the Bracket Claw Locks (code:611380), remove the safety pin of the SCR Steel Toe Trap 28x28 (code:611675) and rotate against the inner timber toe board of the safety platform level. The SCR Steel Toe Trap 28x28 is now in its "open" position.



Step 41 Insert the Bracket Claw Locks (code:611380) in all required positions in Level L-1 (for 2.5 floor units) or level L-2 (for 3.5 floor units). Secure using the safety pin (not shown).



- Step 42** Rotate the SCR Steel Toe Trap 28x28 (code:611675) against the SCR Steel Toe Plate 28x28 (code:611626). Secure the SCR Steel Toe Trap 28x28 with the safety pin removed in step 41.

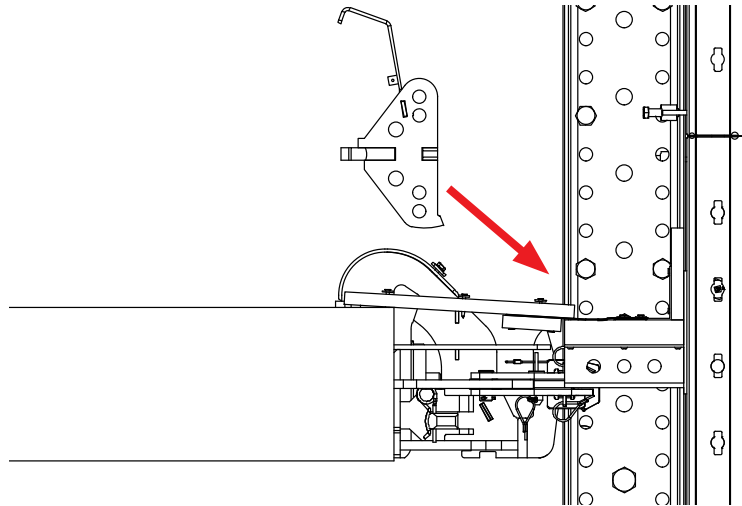


WARNING

Risk of serious injury or death from falling from height!

The SCR Steel Toe Trap 28x28 (code:611675) is now in its "closed" position. customer to ensure that all the SCR Steel Toe Trap 28x28 remain closed at all times during the climbing cycle.

- Step 43** Insert the SCR Wind Latch (code:611810) on Level L0.



- Step 44** Re-position all rubber covers from the safety platform level to the concrete slabs and adjacent SAFESCREEN G2 units, so that all gaps are properly secured.

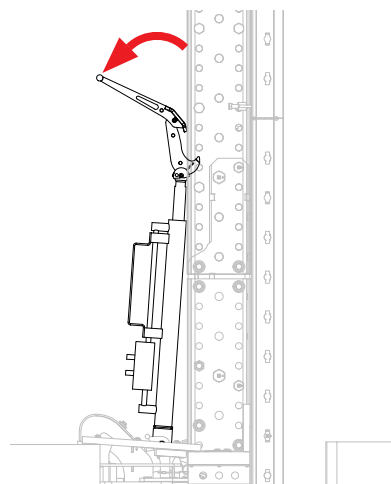
- Step 45** Close all traps of the SAFESCREEN G2 unit.

For the 2.5 floor SAFESCREEN G2 units the climbing sequence is now finished but see step 47. Step 46 is only applicable to the 3.5 floor SAFESCREEN G2 units.

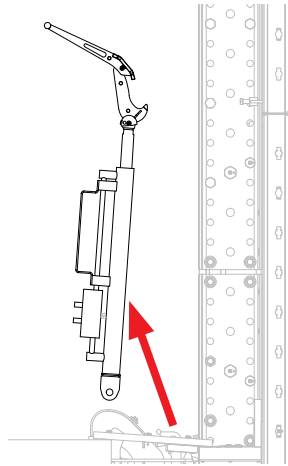
- Step 46** Secure the rail to the slab edge on level L-2.

The following steps are for both the SAFESCREEN G2 2.5 floor units and the 3.5 floor units.

- Step 47** Remove the hydraulic climbing heads from the rails.



Step 48 Remove the hydraulic cylinders from the Bracket Claw Unit of Level L-1.



For long term storage:

- Remove the hose sets from the hydraulic cylinders.
- Remove the hose sets from the power pack.
- Store the power pack and the hoses.



Ensure that the hose sets are stored properly. Do not bend the hoses excessively.

- Store the hydraulic cylinders.



Ensure that the hydraulic cylinders are stored in the retracted position.

12.4 Post-climbing checks

- ☐ Ensure there are no exposed leading edges.
- ☐ Ensure working area is clear of debris and any loose material.
- ☐ Ensure that all Bracket Claw Units (code:611115) are properly engaged.
- ☐ Ensure that all SCR Wind Latches (code:611810) are in place.
- ☐ Ensure that all sealing is intact and in place after climbing.
- ☐ Ensure that all steel toe traps are closed and secured.
- ☐ Ensure that all Bracket Claw Locks (code:611380) are in place.
- ☐ Ensure that all SCR Safety Boxes (code:611450) are fully open.

13 Removing the unit

Hünnebeck recommends that during the removal of the SAFESCREEN G2 units, the following safety measures should be adopted:

- Secure brackets and loose items to prevent them from falling.
- Install collective edge protection systems, where required, for when the SAFESCREEN G2 unit is removed.
- Fence off the area below the SAFESCREEN G2 unit to be removed.
- Install a safety net below the SAFESCREEN G2 unit to be removed.

This is not an exhaustive list. More safety measures may have to be considered depending on the site requirements.

Hünnebeck can provide sites with collective edge protection systems such as:

- PROTECTO
- PROTECTO Net

Please contact your Hünnebeck design office for more information.

14 Maintenance and repairs

Electric check of power pack: 6 months

Hydraulic (oil and filter) replacement: 12 months

All local relevant regulations must be followed.

15 Notes on structural analysis

15.1 Loads

Unless explicitly stated otherwise, all load specifications in this document are safe working loads. This means that characteristic loads can be used for calculations. The following safety factors are included in the safe working load (where applicable):

Load according to DIN EN 1991-1-1

- Live load $\gamma_f = 1.5$
- Dead load $\gamma_f = 1.35$

Resistances

- Steel:
 $\gamma_m = 1.1$
Imperfections, load assumptions and additional rules according to DIN EN 1993 / DIN EN 12810 / DIN EN 12811/ DIN EN 12812 / DIN EN 1991.
- Aluminium:
 $\gamma_m = 1.1$
Imperfections, load assumptions and additional rules according to DIN EN 1999 / DIN EN 12810 / DIN EN 12811 / DIN EN 12812 / DIN EN 1991.
- Timber:
 $\gamma_m = 1.3$
 $K_{mod} = 0.9$
Imperfections, load assumptions and additional rules according to DIN EN 1995 / DIN EN 12810 / DIN EN 12811 / DIN EN 12812 / DIN EN 1991.
- Concrete:
 $\gamma_m = 1.5$
Imperfections, load assumptions and additional rules according to DIN EN 1992 / DIN EN 12810 / DIN EN 12811 / DIN EN 12812 / DIN EN 1991.

These values only include those loads that derive from the respective part itself (unless stated otherwise). An increase of the loads due to effects in the full system (e.g. theory II, substitute horizontal loads, scaffolding class...) have to be considered.

To obtain the design resistance F_{Rd} (in accordance with the Eurocode), multiply F_{zul} with $\gamma_F=1,5$.

15.2 Relevant codes

- EN1993-1-1 Eurocode 3: Design of steel structures – Part 1-1: General rules and rules for buildings
- EN1993-1-8 Eurocode 3: Design of steel structures – Part 1-8: Design of joints
- EN1991-1-4 Eurocode 1: Actions on structures – Part 1-4: General actions – Wind actions
- EN12811-1 Temporary works equipment; Part 1: Scaffolds; Performance requirements and general design
- EN13374 Temporary edge protection systems; Product specification; Test methods

16 Chronology

Changes	Page	Date
Hydraulic climbing removed, reference to the operating instructions	---	2025-02-05

Hünnebeck in the UK

Rush Lane, Dosthill
Tamworth, West Midlands, B77 1LT
Tel.: +44 (0) 1827 289 955
info-uk@huennebeck.com
www.huennebeck.com

The contents of this document, including without limitation, the products, design, images, text, trademarks, service marks and logos contained herein, are protected by copyright and other intellectual property rights. No rights or licences are granted.

The contents of this document are not to be reproduced mechanically, electronically or otherwise, including for distribution, sale or display without our written permission.

The illustrations, processes, materials and/or information in this document are for general information only on the basis that conditions and procedures may differ. No representation, warranty or guarantee is made or implied, including in regard to the fitness or suitability of the product. Overviews and diagrams are for illustrative purposes only.

Specifications may vary and BrandSafway reserves it rights to vary specifications, procedures, and materials due to continuous development, or when required to comply with new regulations, other safety guidance's or industry advancements. The processes set out in the documents should only be undertaken by qualified authorised personnel. The information contained in this document is for use for the applicable product, obtained directly from us.

We may also issue safety notes on products or packaging where required. These notices may affect the manner in which products are used and should therefore be adhered to. The most recent publication is applicable.

Performance, procedures and results may differ based on actual site conditions.

The aforementioned statements do not seek to limit our liability for fraud, or for personal injury or death caused by our negligence. However, we will not be liable for any damage to property, personal injury or any losses caused by failure to follow the instructions contained in our material. It remains the responsibility of the user to comply with the applicable regulations.

Supply of this product is subject to our terms and conditions. For more information, including on the specifications, our terms and conditions/ terms of business and for installation and dismantling procedures, please contact us.

Edition UG 1046 DE 2025-04-03

Keep for later use!