

# **Hanging Platform**

Lightweight platform solution

Including Hanging Platform Clamp, Keyhole Attachment, Relocator, Hanging Platform Beam, Corner Platform and accessories.



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# General

The Combisafe Hanging Platform is used, for example, for roof work, finishing work or lighter work where a platform or scaffolding is required.

A Hanging Platform is often cheaper to install than traditional scaffolding. In addition, it does not take up any ground space, and there is no risks of burglary via the scaffolding.

The system is based on Consoles where Steel Boardwalks or scaffold planks are laid to create a working area. The Consoles can be fitted in different ways using the various attachments.

These attachments provide a range of assembly options: the Hanging Platform can be used for many different applications and for many different types of job.

You can adjust the attachments in the Hanging Platform Console, which also provides the option of adjusting the height of the working surface of the Hanging Platform.

The Hanging Platform has been type examined in accordance with AFS 2023:9 and SS-EN12811-1 by RISE Research Institutes of Sweden, Type examination certificate No 270303.



Type examination certificate No 270303.

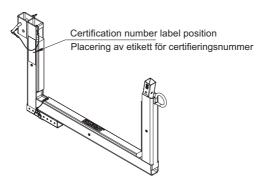
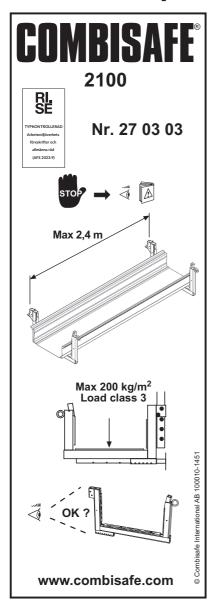


Figure 1. Marking position

# **Description of the marking**



Product reference

Certificate Nmr.

Pictogram advising to read user instruction before use.

Max. UDL (Uniformly Distributed Load).

Pictogram advising the user to visually check assembly

Figure 2. Certification marking

# **Description of product marking**

The marking consists of a text embossed into the steel, the name COMBISAFE and a code. The marking shall be located according to drawing. The marking shall be readable after surface treatment. The height of the marking shall be min. 3 mm or according to drawing. The depth of the marking before surface treatment shall be min. 0,4 mm, no other deformation of geometry of the embossed part is allowed. The code consists of a batch number according to the following example: A0738

A = Manufacturers code, assigned by Combisafe supplier quality engineer.

07 = Year of manufacturing.

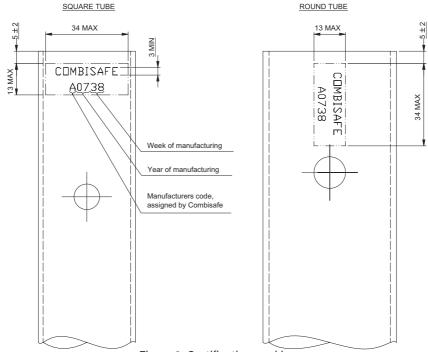
38 = Week of manufacturing.

The code marking shall be connected to the manufacturers result documents and material batches (tests, control documents, certificates, etc.).

The code marking shall be positioned below the COMBISAFE name.

Note! The text rows shall be centered and not left or right adjusted.

The marking shall fit inside a rectangle with max. dimensions 34x13mm, unless otherwise is specified on drawing.



# **Safety instructions**

#### Always check products and equipment before use

Check all component parts to the Hanging Platform system before assembly. Never use damaged or rusty materials as this can affect safety.

#### Do not combine products

It is not allowed to install, combine or interconnect Hanging Platforms using products other than those supplied by Combisafe. Combisafe product liability only applies to combinations with correctly fitted Combisafe products.

#### Always use personal fall arrest equipment

Personal fall arrest equipment must always be worn during assembly and dismantling when a risk of falling exists. Fall protection equipment, such as anchor points, cannot be attached to the hanging platform.



Figure 4. Personal fall arrest equipment

#### Inspection after a fall

If a guard rail is subject to an accident or exposed to a heavy load, the rail must be checked by a competent person. Contact Combisafe in the event of uncertainty.

#### Wind, ice and snow

The Hanging Platform is designed to withstand a wind load of 770 N/m<sup>2</sup> (equal to a wind speed of around 35 m/s) and a wind load of 200 N/m<sup>2</sup> under working conditions (equal to a wind speed of around 18 m/s).

Should you increase the density of the guard rail, for example, by using scaffold sheeting or plywood, the wind load at the given wind strength will increase. Never cover the guard rail without checking that the permitted wind load has not been exceeded.

The Hanging Platform is not designed for exposure to static or dynamic loads resulting from ice and snow. Always keep the Hanging Platform free from ice and snow.

#### Remember

- Plan the fall guard at an early stage, this will benefit everyone.
- Only use inspected safety products.
- Ensure sound and safe access to the installation site/work site and to the Hanging Platform. Remember not to jump down onto the Platform.
- Cordon off below and around the assembly area in connection with the installation so that unauthorized personnel are not injured if, for example, you should drop tools or material.
- Use tools designed for the type of work to be carried out.
- Tighten screws properly and check that split pins lock correctly.
- Keep threads clean and lubricated.
- Keep the installation area in order.
- A safe workplace is an agreeable workplace.
- Many fall accidents occur from a low height.
- Ensure that the height of the guard rail above the eaves is sufficient.
- Check the pitch of the roof if the Hanging Platform is used as fall guard for roofs (see EN13374). For Swedish market: Applications that only apply to use as fall protection are not covered by the requirements for type examination according to AFS 2023:9.
- Check the marking with information on installed system.

#### **Conditions**

- Max distance between Consoles is 2.4 m.
- Max load on the Platform is load class 3 in SS-EN12811-1.
- Max 200 kg/m² UDL (Uniformly Distributed Load).
- Max 100 kg at point load.
- Safety post extender 1242 should only be used in combination with the short safety post 1102 or 2000. Several extenders must not be combined.
- Steel Mesh Barriers must be secured to the Steel Mesh Barrier Holders when installing with safety post 1102, 2000 and 1140, 1142 with old holder 3223. This is achieved using the Combistrap, 100335.
- For safety post 10550 with anti-lift holder 3253 and 11801 with anti-lift holder 3253 is not necessary to use Combistrap.
- In case that you need to use a different combination or Max. c/c spacing between Safety Posts please contact Combisafe with your specific requirements and we will work with you to match our solutions with your needs.

# **Technical data**

# 2100 Hanging Platform Console

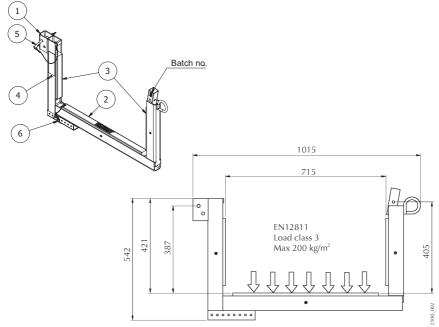


Figure 5. Hanging Platform Console

Item	Quantity	Part no.	Description	Weight:
1	1	10021	Hanging Platform Console Body	13 kg
2	1	10696	Bottom Support	1.0 kg
3	2	10697	Side Support, Inside	0.5 kg
4	3	100062	Wood screw ST 5.5x32	-
5	1	1900	Lock Pin	0.1 kg
6	1	100165	Shaft Locking Pin	-

Weight: 15 kg

Surface finish: Hot-dip galvanized

The Hanging Platform Console is the foundation of the Hanging Platform system, it is the load bearing part where the walking surface and the rail are anchored. It can be installed in different ways.

## 2130 Clamp to Hanging

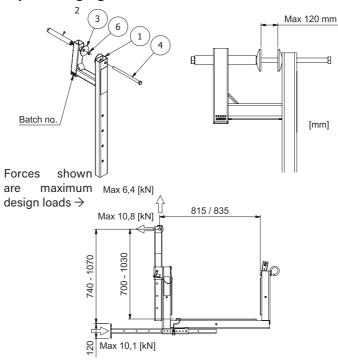


Figure 6. Hanging Platform Clamp

Item	Quantity	Part no.	Description	Weight:
1	1	10329	Hanging Platform Clamp Body	4.3 kg
2	1	10025	Clamp screw for Hanging Platform Clamp	0.6 kg
3	1	10013	Ball Washer	0.07 kg
4	1	100033	Screw M12-200	0.2 kg
5	1	100004	Starlock washer	-

Weight: 5 kg

Surface finish: Hot-dip galvanized / Electrogalvanized

The Hanging Platform Clamp is used to connect the Hanging Platform to the roof truss heads.

# 2150 Keyhole Fixing

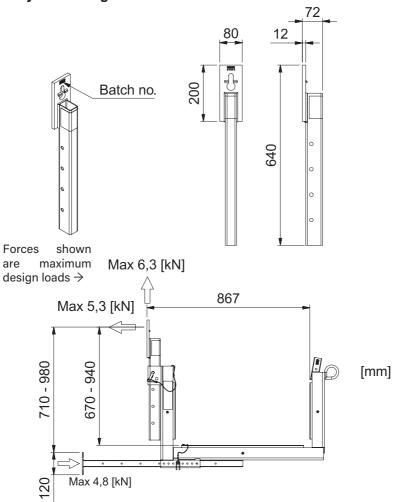


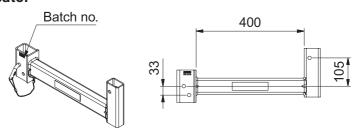
Figure 7. Keyhole Attachment

Weight: 3.6 kg

Surface finish: Hot-dip galvanized

The Keyhole Attachment is used when you want to install the Hanging Platform with a screw assembly, e.g. to a wall.

#### 2140 Relocator



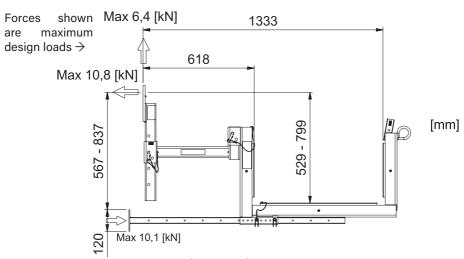


Figure 8. Relocator

Weight: 3.9 kg

Surface finish: Hot-dip galvanized

The Relocator is used when you want to extend the area of the Hanging Platform.

#### NOTE

ONLY USE THE RELOCATOR TOGETHER WITH THE KEYHOLE ATTACHMENT AND DOUBLE SHAFT LOCKING PINS IN THE TELESCOPE ARM.

# 2170 Hanging Platform Beam

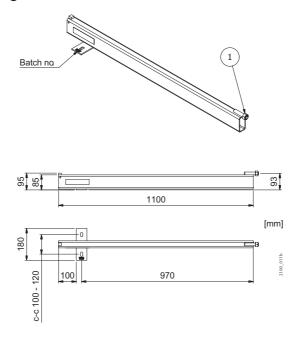


Figure 9. Hanging Platform Beam

Item	Quantity	Part no.	Description	Weight:
1	1	100041	Nut M16	-

Weight: 8.6 kg

Surface finish: Hot-dip galvanized

The Hanging Platform Beam is used when you want to install the Hanging Platform extending from an edge. The cantilever can be adjusted as necessary.

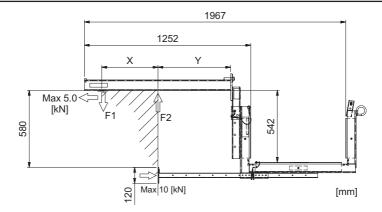


Figure 10. Hanging Platform Beam, dimensions and loads

X [mm]	Y [mm]	F1 [kN]*	F2 [kN]*
770	200	2.2	8.5
670	300	3.5	9.8
570	400	5.2	11.5
470	500	7.6	13.9

\*F1 and F2 are maximum design loads.

 ${\sf F1}$  are the forces that act on the attachment in the concrete. This consists of two expanders with a c-c distance of 100 mm.

## 2300 Steel Boardwalk

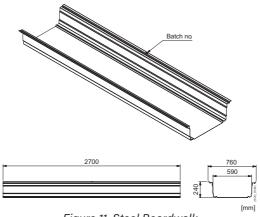


Figure 11. Steel Boardwalk

Weight: 26 kg

Surface finish: Hot-dip galvanized

#### 2305 End Toe Board

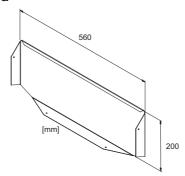


Figure 12. End Toe Board

Weight: 1 kg

Surface finish: Hot-dip galvanized/painted red

The End Toe Board is used at the ends of the Steel Boardwalk.

# 1750/1751 Wall Support

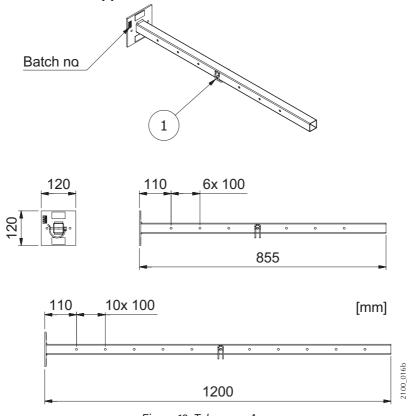


Figure 13. Telescope Arm

Item	Quantity	Part no.	Description	Weight:
1	1	100165	Shaft Locking Pin	-

When using the Relocator, use two Shaft Locking Pins.

Weight: 1750 - 2.3 kg, 1751 - 3.0 kg Surface finish: Hot-dip galvanized

The Telescope Arm represents the support to the facade for the Hanging Platform system.

# **2110 Corner Platform Console**

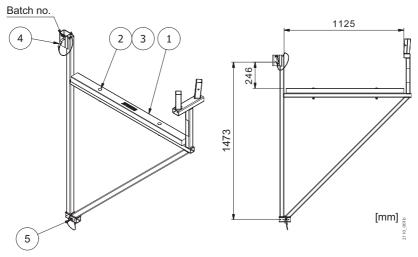


Figure 11. Corner Platform Console

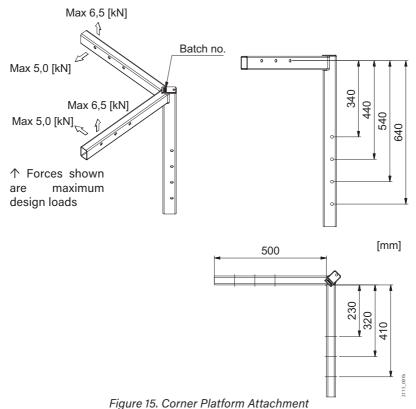
Item	Quantity	Part no.	Description	Weight:
1	1	10709	Bottom Support	2.4 kg
2	2	100228	Screw	-
3	2	100027	Nut	-
4	1	1900	Lock Pin	0.1 kg
5	1	100165	Shaft Locking Pin	-

Weight: 21 kg

Surface finish: Hot-dip galvanized

The Corner Platform is wider than the Hanging Platform and is used in the corners.

#### **2115 Corner Platform Attachment**



Weight: 7.6 kg

Surface finish: Hot-dip galvanized

The Corner Platform Attachment is fixed to the corner of the facade.

# 2120 Corner wall support

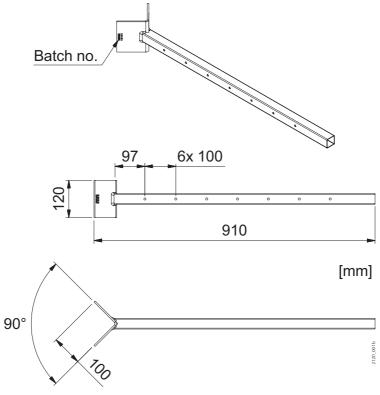


Figure 16. Corner Telescope Arm

Weight: 2.7 kg

Surface finish: Hot-dip galvanized

The corner Telescope Arm is adapted to support against a corner.

# Safety Post 1102

1102 Registered design

SystemSto	eel Mesh Barrier System S
Weight	3.5 kg
Surface finish	Hot-dip galvanized
Conforms to EN	13374 class A, B, C

#### Spare parts list

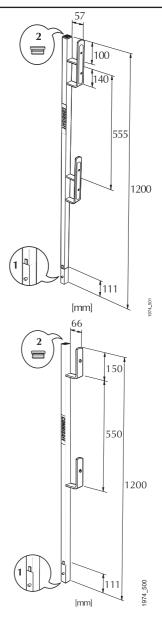
Item	Part no.	Information
1	1132	Quiclox
2	100211	PVC

# Safety Post 2000

SystemSte	eel Mesh Barrier System S
Weight	3.6 kg
Surface finish	Hot-dip galvanized
Conforms to FN 1	3374 class A. B. C

#### **Spare parts list**

Item	Part no.	Information
1	1132	Quiclox
2	100211	PVC



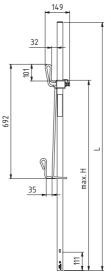
# Adjustable 1140/1142

# Safety

**Post** 

System......Steel Mesh Barrier System S Weight .......3.5/6.2 kg Surface finish.......Hot-dip galvanized Conforms to EN 13374 class A, B, C

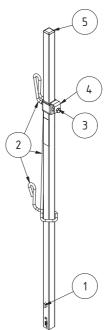
Safety Post no.	Item parts	L	н
1140	10550+3253	1.5 m	1.4 m
1142	11801+3253	1.8 m	1.38 m



#### Spare parts list

Item	Part no.	Information
1	1132	Quiclox
2	3223/ 3253	Steel Mesh Barrier Holder
3	100175	M12 Hex Screw*
4	10520	Clamp*
5	100211	Plastic Plug

<sup>\*</sup>included in item 2



#### 1242 Post Extender 240 mm

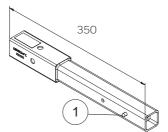


Figure 17. Post Extender 240 mm

Item	Quantity	Part no.	Description	Weight
1	1	1130	Snappi	0.01

## 3203/3203Z Steel Mesh Barrier

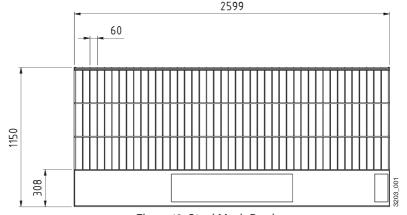


Figure 18. Steel Mesh Barrier

Weight: 19.5 kg

Surface finish: 3203 Powder coated / 3203Z Galvanized + Powder coated.

The Steel Mesh Barrier 3203/3203Z complies to the requirements in EN 13374 for classes A. B and C.

# 3204/3204Z Steel Mesh Barrier 1.3 m

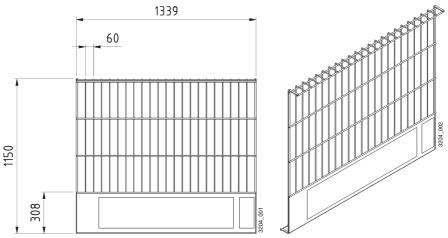


Figure 19. Steel Mesh Barrier 1,3 m

Weight: 10.5 kg

Surface finish: 3204 Powder coated / 3204Z Galvanized + Powder coated.

The Steel Mesh Barrier 3204/3204Z complies to the requirements in EN 13374 for classes A, B and C.

## 3240/3240Z Lightweight Barrier ABC 2.6 m

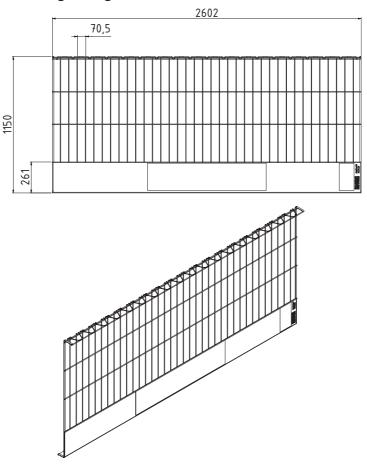


Figure 20. Steel Mesh Barrier Lightweight Class ABC 2.6 m

Weight: 14.2 kg

Surface finish: 3240 Powder coated / 3240Z Galvanized + Powder coated.

The Steel Mesh Barrier 3240/3240Z complies to the requirements in EN 13374 for classes A, B and C.

# 3241/3241Z Lightweight Barrier ABC 1.5 m

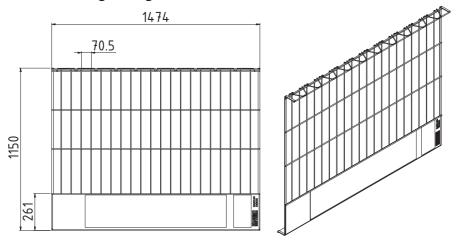


Figure 21. Steel Mesh Barrier Lightweight Class ABC 1.5 m

Weight: 8.7 kg

Surface finish: 3241 Powder coated / 3241Z Galvanized + Powder coated.

The Steel Mesh Barrier 3241/3241Z complies to the requirements in EN 13374 for classes A, B and C.

# 3245/3245Z Lightweight Barrier A 2.6 m

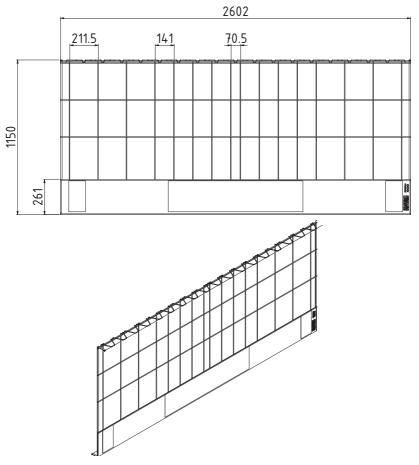


Figure 22. Steel Mesh Barrier Lightweight Class A 2.6 m

Weight: 12.2 kg

Surface finish: 3245 Powder coated / 3245Z Galvanized + Powder coated

The Steel Mesh Barrier 3245/3245Z complies to the requirements in EN 13374 for class A. These requirements have not been considered or controlled in the framework of the Swedish type examination.

# 3246/3246Z Lightweight Barrier A 1.5 m

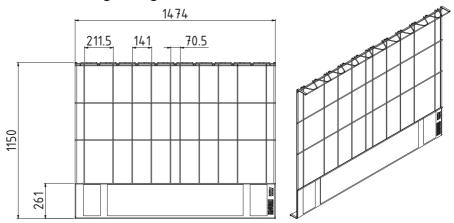


Figure 23. Steel Mesh Barrier Lightweight Class A 1.5 m

Weight: 7.8 kg

Surface finish: 3246 Powder coated / 3246Z Galvanized + Powder coated.

The Steel Mesh Barrier 3246/3246Z complies to the requirements in EN 13374 for class A. These requirements have not been considered or controlled in the framework of the Swedish type examination.

## 3266/3266Z Steel Mesh Debris Barrier Lightweight 2.6 m

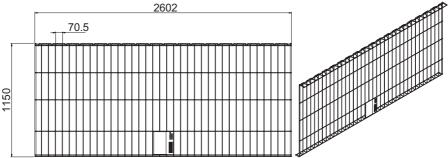


Figure 24. Steel Mesh Debris Barrier Lightweight Class AB 2.6 m

Weight: 11.7 kg

Surface finish: 3266 Powder coated / 3266Z Galvanized + Powder coated.

The Steel Mesh Barrier 3266/3266Z complies to the requirements in EN 13374 for class A, B. These requirements have not been considered or controlled in the framework of the Swedish type examination.

#### 3267/3267Z Steel Mesh Debris Barrier Lightweight 1.5 m

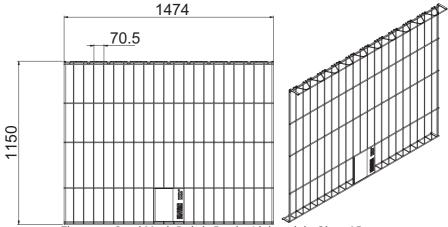


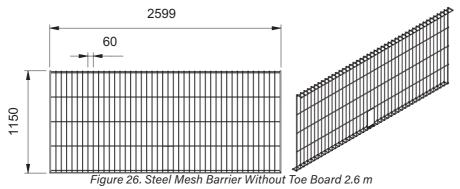
Figure 25. Steel Mesh Debris Barrier Lightweight Class AB 1.5 m

Weight: 7.3 kg

Surface finish: 3267 Powder coated / 3267Z Galvanized + Powder coated.

The Steel Mesh Barrier 3267/3267Z complies to the requirements in EN 13374 for class A, B. These requirements have not been considered or controlled in the framework of the Swedish type examination.

#### 3213 Steel Mesh Barrier Without Toe Board 2.6 m

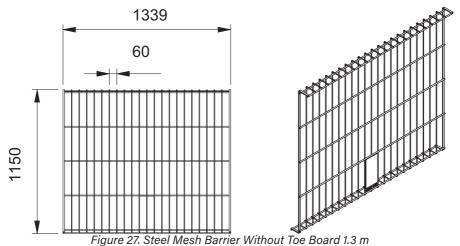


Weight: 16.7 kg

Surface finish: Powder coated.

The Steel Mesh Barrier 3213 complies to the requirements in EN 13374 for class A, B. These requirements have not been considered or controlled in the framework of the Swedish type examination.

#### 3214 Steel Mesh Barrier Without Toe Board 1.3 m



Weight: 9.2 kg

Surface finish: Powder coated.

The Steel Mesh Barrier 3214 complies to the requirements in EN 13374 for class A, B. These requirements have not been considered or controlled in the framework of the Swedish type examination.

## 3260/3260Z Steel Mesh Barrier Lightweight Make-Up 2.6 m

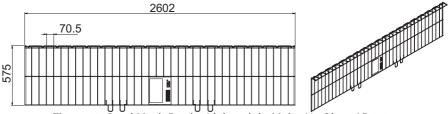


Figure 28. Steel Mesh Barrier Lightweight Make-Up Class AB 2.6 m

Weight: 7 kg

Surface finish: 3260 Powder coated / 3260Z Galvanized + Powder coated

The Steel Mesh Barrier 3260 complies to the requirements in EN 13374 for class A, B. These requirements have not been considered or controlled in the framework of the Swedish type examination.

## 3261/3261Z Steel Mesh Barrier Lightweight Make-Up 1.5 m

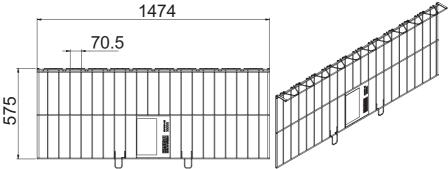


Figure 29. Steel Mesh Barrier Lightweight Make-Up Class AB 1.5 m

Weight: 4.4 kg

Surface finish: 3261 Powder coated / 3261Z Galvanized + Powder coated.

The Steel Mesh Barrier 3261 complies to the requirements in EN 13374 for class A, B. These requirements have not been considered or controlled in the framework of the Swedish type examination.

## 3217 Steel Mesh Barrier Make-Up MkII 2.6 m

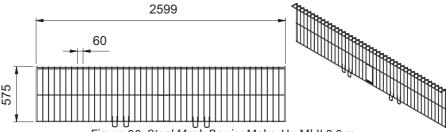


Figure 30. Steel Mesh Barrier Make-Up MkII 2.6 m

Weight: 9.2 kg

Surface finish: Powder coated.

The Steel Mesh Barrier 3217 complies to the requirements in EN 13374 for class A, B. These requirements have not been considered or controlled in the framework of the Swedish type examination.

# 3218 Steel Mesh Barrier Lightweight Make-Up MkII 1.3 m

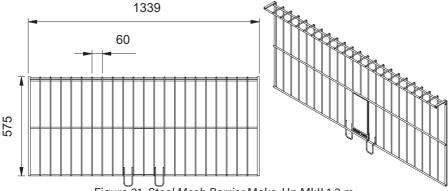


Figure 31. Steel Mesh Barrier Make-Up MkII 1.3 m

Weight: 5.1 kg

Surface finish: Powder coated.

The Steel Mesh Barrier 3218 complies to the requirements in EN 13374 for class A, B. These requirements have not been considered or controlled in the framework of the Swedish type examination.

## 2201 Gable Gate 700

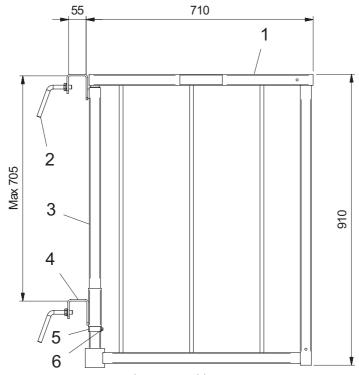


Figure 32. Gable Gate

Item	Quantity	Part no.	Description	Weight:
1	1	10564	Gate part Short	7.6 kg
2	2	10063	Screw	0.15 kg
3	1	10104	Gable gate locking ring	2.9 kg
4	1	10103	Gable gate running hook	1.3 kg
5	1	10101	Gable gate locking ring	0.04 kg
6	1	100051	Tapping flange screw M5-16	-

Weight: 11.8 kg

Surface finish: Electrogalvanized/painted red

The Gable Gate is used as a rail at the end of the platform.

## 2220 Gable Gate Extender

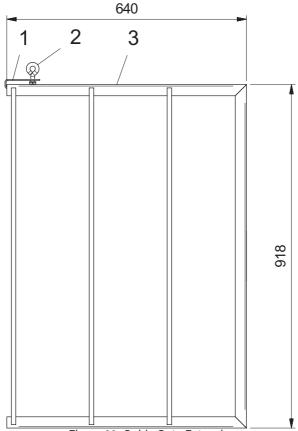


Figure 33. Gable Gate Extension

Item	Quantity	Part no.	Description	Weight:
1	1	10601	J-bracket	0.2 kg
2	1	100233	Eye bolt	0.07 kg
3	1	10602	Gable Gate extender frame	6.5 kg

Weight: 6.8 kg

Surface finish: Hot-dip galvanized

The Gable Gate Extension can used to extend Gable Gate 2201.

## 2135 Clamp Extender

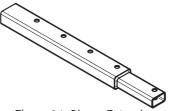


Figure 34. Clamp Extender

Weight: 2.5 kg

Surface finish: Hot-dip galvanized

Used to increase the height of the Safety Post and Steel Mesh Barrier

# 3258 SMBL Angle Console

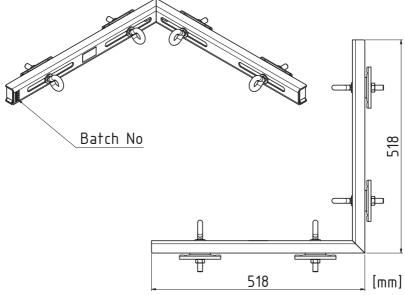


Figure 35. SMBL Angle Console

Weight: 3.0 kg

Surface finish: Hot-dip galvanized

The SMBL Angle Console is used to connect Steel Mesh Barriers and create a corner in the end of a Hanging Platform as an alternative to using the Gable Gate.

# **Assembly**

General assembly and rigging might be affected by national regulations, beside the standards EN 12810 and EN 12811. Please make sure to check.

For Swedish market: For construction, use, dismantling and maintenance details described in this chapter, rules according to AFS 2023:9 must be followed.

# **Hanging Platform Clamp**

Max c-c distance is 2.4 m.

Take into consideration the loads from the Hanging Platform that affect the roof trusses and the facade (see subchapter "Reaction forces acting on the facade").

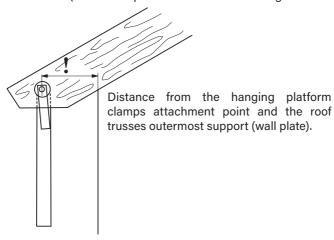


Figure 36. Hanging Platform Clamp

Check that the roof truss is free from cracks and knots or other defects that might affect strength.

 Drill a 15 mm hole in the roof truss end as per the picture below. The dimensions refer to the distance from the hole to the edge of the roof truss. In the direction of the grain this must be at least 120 mm, and the distance at right angles to the grain must be at least 60 mm.

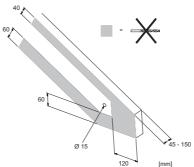


Figure 37. Dimensional draft

- Place the Hanging Platform Clamp over the hole. The Hanging Platform Clamp can be placed in two different directions depending on which side of the roof truss you want to suspend the Hanging Platform Console, as well as where the support to the facade ends up.
- 3. Attach the Hanging Platform Clamp using the M12x200 screw through the hole. Thread the M12 screw in the clamp screw's internal thread to the bottom. Check that the Hanging Platform Clamp is hanging plumb and tighten securely.

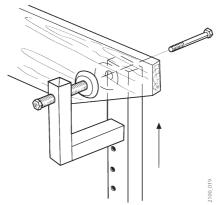


Figure 38. Placement of Hanging Platform Clamp

## **Keyhole Attachment**

Max c-c distance is 2.4 m.

Take into consideration the loads from the Hanging Platform that affect the attachment and the facade.

- 4. Fit the Keyhole Attachment in the form of expander, and through thread sup-port or equivalent. See instructions from the expander manufacturer or equivalent (see subchapter "Reaction forces acting on the facade").
- 5. Fit the Keyhole Attachment on to the stud. The Keyhole Attachment is sized to accept an M16 fixing.
- 6. Check that the Keyhole Attachment is hanging plumb and tighten securely.

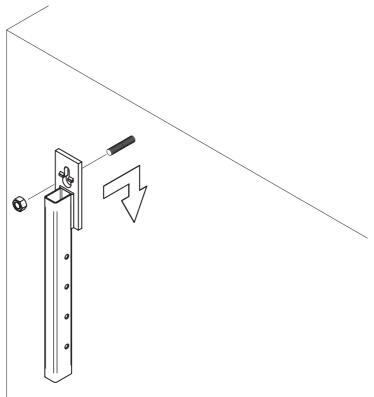


Figure 39. Assembly of Keyhole Attachment

# **Alternative assembly of Keyhole Attachment**

As an alternative the Hanging Platform Console, Telescope Arm and Keyhole Attachment can be fitted together before being suspended.

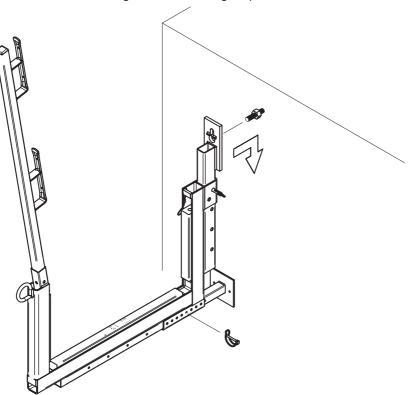


Figure 40. Alternative assembly of Keyhole Attachment

# **Hanging Platform Beam**

Max c-c distance is 2.4 m.

- Decide how much of the Hanging Platform Beam needs to protrude. Take into consideration the loads from the Hanging Platform Beam when selecting the fixings and ensure the capacity of the support edge. These loads affect the length of cantilever.
- 8. Fit the Hanging Platform Beam using suitable fixings (see subchapter "Reaction forces acting on the facade").

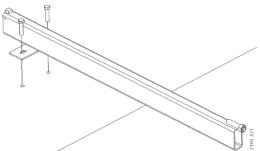


Figure 41. Assembly of Hanging Platform Beam

9. Fit the Keyhole Attachment on the Hanging Platform Beam screw.10. Check that the Keyhole Attachment is hanging plumb and tighten the screw.

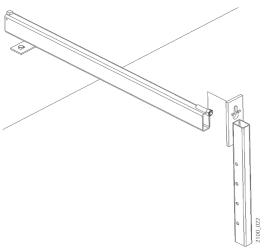


Figure 42. Assembly of Keyhole Attachment on Hanging Platform Beam

### Relocator

#### NOTE

#### ONLY USE THE RELOCATOR TOGETHER WITH THE KEYHOLE ATTACHMENT.

Max c-c distance is 2.4 m.

Take into consideration the increased fixing load when using the Relocator, and ensure the suitability of both fixing and base material.

Assembly of Relocator on Keyhole Attachment:

- 11. Fit the Keyhole Attachment as per the assembly of Keyhole Attachment instructions. Page 29.
- 12. Fix the Relocator on the Keyhole Attachment using a Lock Pin. (see subchapter "Reaction forces acting on the facade").

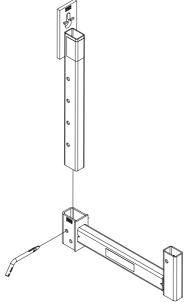


Figure 43. Assembly of Relocator

# Alternative assembly of Relocator

Fit the Relocator on the Keyhole Attachment before mounting on the facade.

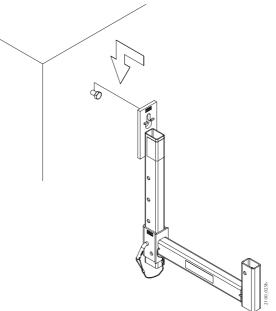
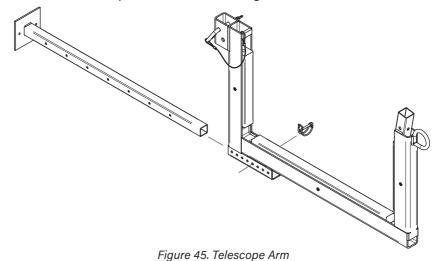


Figure 44. Alternative assembly of Relocator

## **Hanging Platform Console and Telescope Arm**

- 13. Check that the facade can accept the load applied through the Telescope Arm. The force applied by the Telescope Arm is equivalent to the pull out load applied to the fixing (see subchapter "Reaction forces acting on the facade").
- 14. Fit the Telescope Arm into the Hanging Platform Console. Select the appropriate Telescope Arm and adjust it to set the Hanging Platform Console level. The simplest way of doing this is to test a Hanging Platform Console with a Telescope Arm and adjust the Telescope Arm to the correct dimensions.
- 15. Secure the Telescope Arm with Shaft Locking Pin.



#### NOTE

IF A RELOCATOR IS USED, THE TELESCOPE ARM IS ATTACHED USING TWO SHAFT LOCKING PINS.

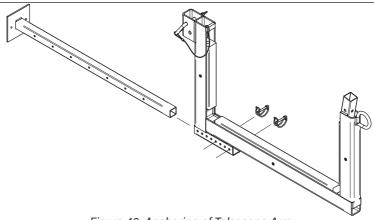


Figure 46. Anchoring of Telescope Arm

16. Fit the Hanging Platform Console at a suitable height on the attachment. Fix the Hanging Platform Console using the Lock Pin.

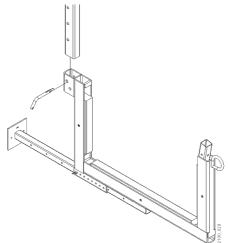


Figure 47. Fixing the Telescope Arm

17. Check that the Telescope Arm provides proper support from the facade.

## **Assembly of Corner Platform**

The Corner Platform can be assembled in two ways: using a Corner Platform Attachment or extended Hanging Platform Clamp.

### **Assembly with Corner Platform Attachment**

18. Fit the Corner Platform Attachment using a suitable fixing on each side of the corner. Each anchor must be capable of accepting a combined load of 5.0 kN in withdrawal load and 6.3 kN in shear. With some fixings it may be possible to drill straight through the Corner Platform Attachment, using it as a drill guide. Now continue to assemble the Corner Platform as per item 2, chapter Assembly with extended Hanging Platform Clamp.



Figure 48. Assembly of Corner Platform Attachment

## **Assembly with extended Hanging Platform Clamp**

This assumes that the roof truss protrudes at a 45° angle in the corner. Check the bearing capacity of the roof truss.

- 19. Fit an extended Hanging Platform Clamp to the corner roof truss, see chapter Assembly/Hanging Platform Clamp.
- 20. Fit the Corner Telescope Arm in the Corner Platform and adjust the length. This can be adjusted later on site, but it helps if the length is right from the beginning. Fix the Corner Telescope Arm with the Shaft Locking Pin supplied.

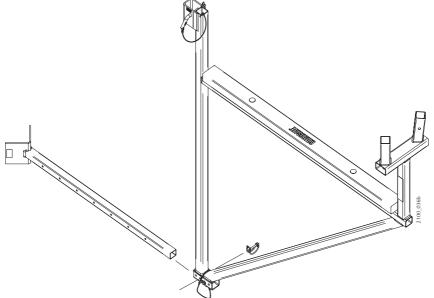


Figure 49. Assembly of Corner Telescope Arm on Corner Platform

21. Fit the Corner Platform on the Corner Attachment or Clamp. Lock the Corner Platform using a Lock Pin at the same height as nearby Hanging Platforms.

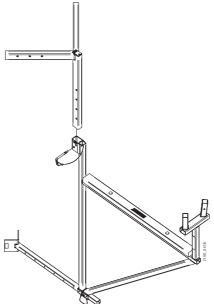


Figure 50. Assembly of Corner Platform on Corner Attachment or Clamp.

22. Fit the Steel Boardwalks or scaffold planks as walking surface.

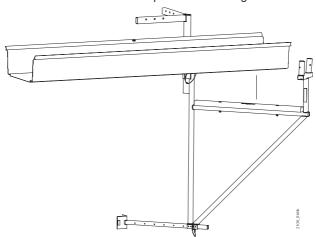


Figure 51. Assembly of Steel Boardwalk on Corner Platform

Steel Boardwalks adapted for use in corners can be ordered from Combisafe. They are available in two variants, for right hand corners (Part no. 2310) and left hand corners (Part no. 2315). The Steel Boardwalks must be laid overlapping on the corner platforms. Fix the Steel Boardwalks with screws in the hanging platform bracket's wood inserts. It is also possible to cut a "normal" boardwalk panel to be used for the corner platform. This is done by cutting off the toe board on one side of the panel, 530 mm in from the end. Different sides of the panel must be cut depending on which side of the corner the panel is to be positioned.

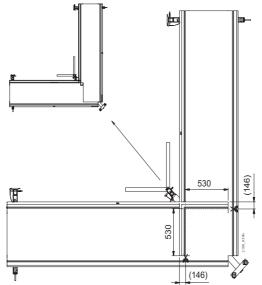


Figure 52. Placement and cutting of Steel Boardwalks

#### Inner corner

The Corner Platform can also be used as an inner corner assuming that an attachment can be fitted.

In order for a Corner Telescope Arm to give support in an inner corner, you have to insert a wooden block in it. Either drill a hole in the bent steel section in the corner Telescope Arm enabling you to nail or screw a wooden block to it, or fit the wooden block in the corner of the building so that the Corner Telescope Arm gets support from it.



Figure 53. Wooden block and Corner Telescope Arm

### **Steel Boardwalk**

- 23. Assemble the Steel Boardwalks in the Hanging Platform Consoles.
- 24. Fix the Steel Boardwalks using screws in the Hanging Platform Consoles' wood inserts.

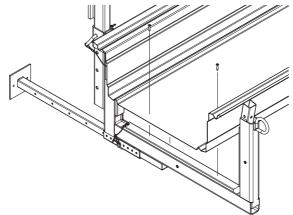
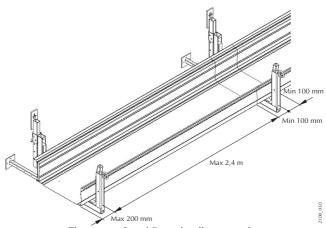


Figure 54. Fixing the Steel Boardwalks

25. Overlap the Steel Boardwalks on the Hanging Platform Consoles. The minimum overlap over the Hanging Platform Console is 100 mm. The maximum free protrusion in the end is 200 mm.



## **Safety Posts and Steel Mesh Barriers**

- 26. Fit the Safety Posts into the attachments on the Hanging Platform Consoles, with the brackets facing inwards.
- 27. Press in Quiclox and press the Safety Post down into the attachment. The Safety Post is locked when Quiclox snaps out in the hole in the attachment.

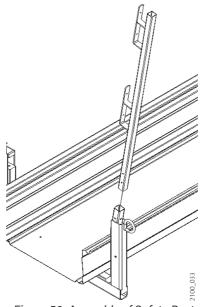


Figure 56. Assembly of Safety Post

#### **IMPORTANT**

SAFETY POST EXTENDER 1242 SHOULD ONLY BE USED IN COMBINATION WITH THE SHORT SAFETY POST 1102 OR 2000. SEVERAL EXTENDERS MUST NOT BE COMBINED.

## CUSTOMER SERVICE CONTACT

Fit the Steel Mesh Barriers onto the Safety Posts by suspending them over the Safety Posts and brackets. Both brackets on the Safety Post must go through the mesh: the top of the Safety Post must go up through the top edge of the Steel Mesh Barriers.

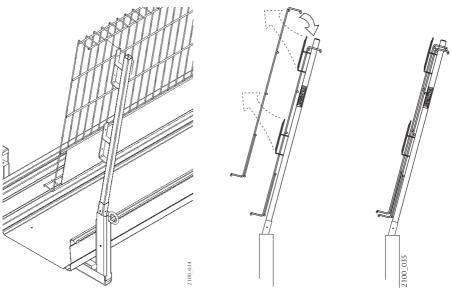
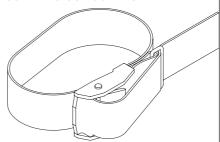


Figure 57. Assembly of the Steel Mesh Barrier

#### **IMPORTANT**

STEEL MESH BARRIERS MUST BE SECURED TO THE STEEL MESH BARRIER HOLDERS WHEN INSTALLING WITH SAFETY POST 1102, 2000 AND 1140, 1142 WITH OLD HOLDER 3223. THIS IS ACHIEVED USING THE COMBISTRAP, 100335. FOR SAFETY POST 10550 WITH ANTI-LIFT HOLDER 3253 AND 11801 WITH ANTI-LIFT HOLDER 3253 IS NOT NECESSARY TO USE COMBISTRAP.

#### CUSTOMER SERVICE CONTACT



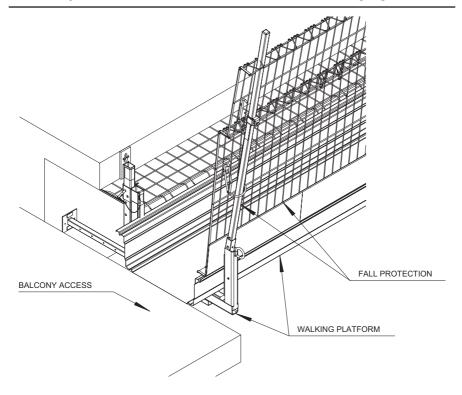


Figure 58. Hanging Platform system description

#### **IMPORTANT**

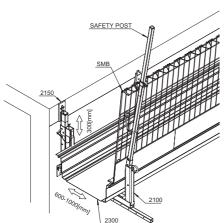
FALL PROTECTION EQUIPMENT, SUCH AS ANCHOR POINTS, CANNOT BE ATTACHED TO THE HANGING PLATFORM. IT IS NOT SUITABLE FOR PERSONAL FALL PROTECTION OR FOR ACCESS TO ANOTHER BUILDING.

USE SAFETY NET TO CLOSE THE GAP BETWEEN THE FAÇADE AND THE HANG-ING PLATFORM CONSOLE. USE COMBISTRAP 100335 TO ATTACH THE NET TO HANGING PLATFORM CONSOLE.

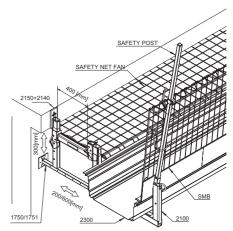
#### CUSTOMER SERVICE CONTACT

# **Possible Hanging Platform combination uses**

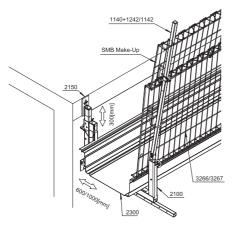
2150+1751



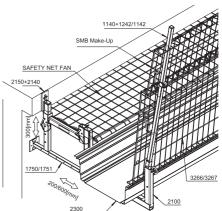
2150+1751+2140



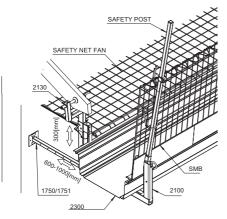
2150+1751+MakeUp



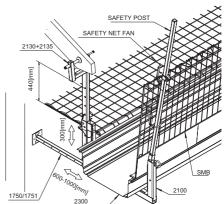
2150+1751+2140+MakeUp



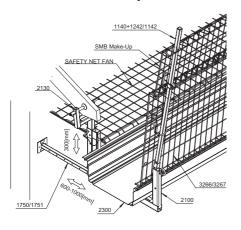
## 2130+1751



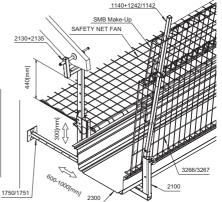
## 2130+1751+2140



2130+1751+MakeUp

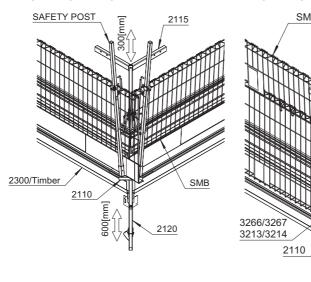


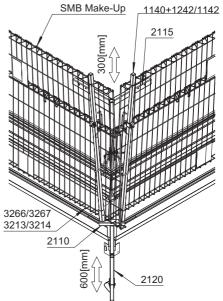
# 2130+1751+2140+MakeUp



### 2110+2115+2120

# 2110+2115+2120+MakeUp





#### **IMPORTANT**

IN CASE THAT YOU NEED TO USE A DIFFERENT COMBINATION OR MAX. C/C SPACING BETWEEN SAFETY POSTS PLEASE CONTACT COMBISAFE WITH YOUR SPECIFIC REQUIREMENTS AND WE WILL WORK WITH YOU TO MATCH OUR SOLUTIONS WITH YOUR NEEDS.

#### CUSTOMER SERVICE CONTACT

# Possible Hanging Platform combination uses

Barrier	Post	Post-extender	Relocator	MU	Max C/C
3203	1140	No	Yes	No	2.4
3203	1142	No	Yes	No	2.4
3240	1102	No	Yes/No	No	2.4
3240	1140	No	Yes/No	No	2.4
3240	1142	No	Yes/No	No	2.4
3245	1102	No	Yes/No	No	2.4
3245	1140	No	Yes/No	No	2.4
3245	1142	No	Yes/No	No	2.4
3213	1140	1242	Yes/No	3217/3260	2.4
3213	1142	No	Yes/No	3217/3260	2.4
3266	1140	1242	Yes/No	3217/3260	2.4
3266	1142	No	Yes/No	3217/3260	2.4
3203	1140	1242	Yes/No	3217/3260	1.4
3203	1142	No	Yes/No	3217/3260	1.4
3240	1140	1242	Yes/No	3217/3260	1.8
3240	1142	No	Yes/No	3217/3260	1.8
3245	1140	1242	Yes/No	3217/3260	2
3245	1142	No	Yes/No	3217/3260	2
3245	1142	No	Yes	3260	2.3
3213	1102	No	Yes/No	No	2.4
3213	1140	No	Yes/No	No	2.4
3213	1142	No	Yes/No	No	2.4
3266	1102	No	Yes/No	No	2.4
3266	1140	No	Yes/No	No	2.4
3266	1142	No	Yes/No	No	2.4

# ! NOT POSSIBLE Hanging Platform combinations !

Barrier	Post	Post-extender	Relocator	MU	Max C/C
3203	1102	No	Yes/No	No	2.4
3203	1140	No	No	No	2.4
3203	1142	No	No	No	2.4

# Reaction forces acting on the facade

Reaction forces	FR1 [kN]	FR2 [kN]	FR3 [kN]
2100 + 2130	10.1	10.8	6.4
2100 + 2150	4.8	5.3	6.3
2100 + 2140	10.1	10.8	6.4
2100 + 2170	10	5	13.9

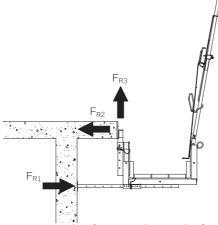


Figure 61. Reaction forces acting on the facade

#### **IMPORTANT**

IN CASE THAT YOU NEED TO USE A DIFFERENT COMBINATION OR MAX. C/C SPACING BETWEEN SAFETY POSTS PLEASE CONTACT COMBISAFE WITH YOUR SPECIFIC REQUIREMENTS AND WE WILL WORK WITH YOU TO MATCH OUR SOLUTIONS WITH YOUR NEEDS.

#### CUSTOMER SERVICE CONTACT

#### **End Toe Board**

Attach the End Toe Board onto the Steel Boardwalks using four screws. We recommend fitting the end sections onto the Steel Boardwalks on the ground before lifting into position.

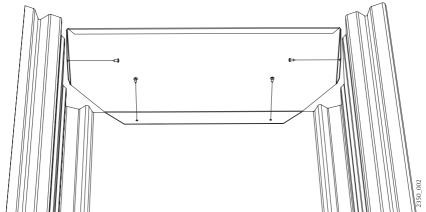


Figure 62. Assembly of End Toe Boards

#### **Gable Gate**

One of two methods of enclosing also the ends of the hanging Platform is using a Gable Gate.

In order to fit the Gable Gate to the end of the platform, a guide is needed. This is formed by fitting two pieces of wood 45x95 mm into the last two Safety Posts. Fit the wooden guides into the post brackets outside of the Steel Mesh Barriers. Let the wooden rails protrude around 150 mm beyond the edge of the Steel Mesh Barrier. Attach the guides to the Safety Posts using nails or screws. Fit the Gable Gate onto the wooden guides by placing the Gable Gate's channeled sections over the guides and tightening the attachment screws on the channeled sections. If necessary the Gable Gate 2201 can be combined with a Gable Gate Extension 2220.

### **Short version of Steel Mesh Barriers**

Another method of closing the end of the platform and make sure the working area is fully screened is using a Steel Mesh Barrier 3204/3241/3246 combined with SMBL Angle Consoles 3258 to interconnect the Steel Mesh Barriers.

Mount the two SMBL Angle Consoles 3258 to the longitudinal Steel Mesh Barrier 3203/3240/3245 first and make sure they are positioned close to the bottom and top of the Barrier, as far apart as possible. Put the shorter Steel Mesh Barrier 3204/3241/3246 into position perpendicularly and secure it to the two SMBL Angle Consoles.

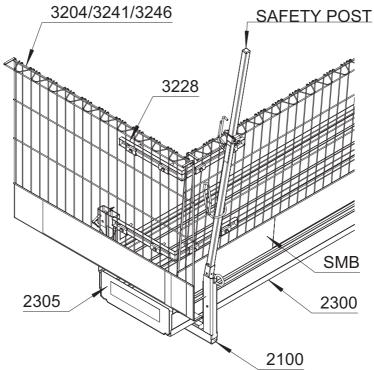


Figure 63. Closing end of platform by using Steel Mesh Barrier 3204/3241/3246 and SMBL Angle Consoles 3258

#### **Short version of Steel Mesh Barriers**

Another method of closing the end of the platform and make sure the working area is fully screened is using a Steel Mesh Debris Barrier Lightweight 3266/3267 combined with Steel Mesh Barrier Lightweight Make-Up 3260/3261/3217/3218 combined with SMBL Angle Consoles 3258 to interconnect the Steel Mesh Barriers.

Mount the two SMBL Angle Consoles 3258 to the longitudinal Steel Mesh Debris Barrier Lightweight 3266/3267 and two SMBL Angle Consoles 3258 first on the longitudinal Steel Mesh Barrier Lightweight Make-Up 3260/3261/3217/3218 and make sure they are positioned close to the bottom and top of the Barrier/Make-Up, as far apart as possible. Put the shorter Steel Mesh Barrier 3261/3218 and Make-Up 3261/3218 into position perpendicularly and secure it to the two SMBL Angle Consoles.

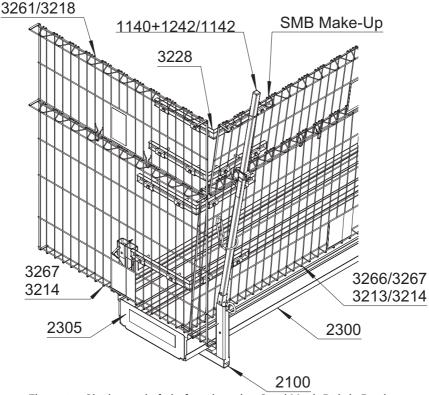


Figure 64. Closing end of platform by using Steel Mesh Debris Barriers Lightweight, Make-Ups and SMBL Angle Consoles 3258

# Inspection

### Inspection after assembly

The completed installation must be inspected prior to handover.

The following checklist should be used:

#### Checklist for installing the Hanging Platform

- Has the Hanging Platform been inspected and does it conform to the local regulations? For the Swedish market: Is the Hanging platform type examined according to and complies to the requirements in AFS 2023:9?
- Is the max c-c distance 2.4 m?
- Are the mounting points strong enough?
- Does the support to the facade have adequate bearing capacity or inserts?
- Is the working surface fixed down?
- Are the toe boards fitted?
- . Is the guard rail strong enough?
- Are the gables protected?
- Are there access routes?
- Are the Hanging Platform Consoles properly anchored?

#### **Hanging Platform Clamp**

- Is the distance to the edge of the holes in the roof truss correct?
- Are the through screws and clamps properly tightened?
- Is the A dimension correct?

#### **Keyhole Attachment**

- Is the fixing suitable for the base material and correctly installed, edge distance etc.?
- Is the Keyhole Attachment properly fitted?

#### **Hanging Platform Beam**

- Is the fixing suitable for the base material and correctly installed, edge distance etc.?
- Have the cantilever loads been correctly assessed and considered?
- Is the Keyhole Attachment properly fitted?

#### Relocator

- Is this used together with the Keyhole Attachment?
- Is it correctly fitted to the Keyhole Attachment?
- Is the Telescope Arm attached with two screws?

# **Dismantling**

The installation procedure should be performed in the reverse order when dismantling. Remove the Safety Post from the Hanging Platform Console by pressing in Quiclox and pulling out the Safety Post.

Pack the Steel Mesh Barriers correctly in the mesh boxes, see instructions for packing the Barrier Box.

# **Maintenance**

## Safety checks

A safety check should be made on all products before being used again. The check is ideally made after use, before the products are placed in the stores. The safety check must be carried out by qualified personnel. Combisafe recommends that the safety check is only to be carried out by persons trained by Combisafe.

#### Check that:

- No parts are cut or joined.
- No parts are bent to excess or in any other way deformed.
- No new drill holes have been made.
- No corrosion has occurred that can affect strength.
- No visible cracks have occurred in welds or the material.
- Parts fit together, e.g. that Safety Posts fit in the Hanging Platform Consoles and that attachments and Telescope Arms fit in the Hanging Platform Consoles.

## Reconditioning

Products rejected during safety checks can be reconditioned. Reconditioning must be carried out by qualified personnel. Combisafe recommends that reconditioning is only to be carried out by persons trained by Combisafe.

Recondition according to the following guidelines:

- Only cold processing is permitted.
- Clean the parts.
- Replace damaged parts that cannot be reconditioned.
- Scrap parts that after straightening show signs of fracture or that do not reach a satisfactory condition after reconditioning.

## Scrapping

Products identified during the safety checks and which have not been possible to recondition should be discarded and destroyed so that they cannot be used.

Most Combisafe products are manufactured of steel and can be scrapped as steel in their entirety. There are some exceptions. Check with Combisafe in the event of uncertainty.

## Storage

Store Combisafe products in a dry, ventilated area protected from environmental effects, e. g. weather and corrosive substances.

#### **CUSTOMER SERVICE CONTACT**

E-mail: order@combisafe.com Phone: +44 (0)1604 660 600 **Global technical support portal** sps-support.honeywell.com

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