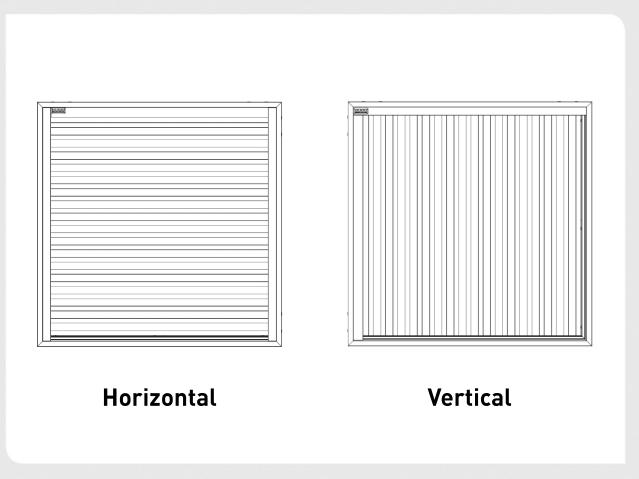
Assembly instructions

DUCO Ventilation & Sun Control

DucoGrille Classic 60HP

22/12/2023

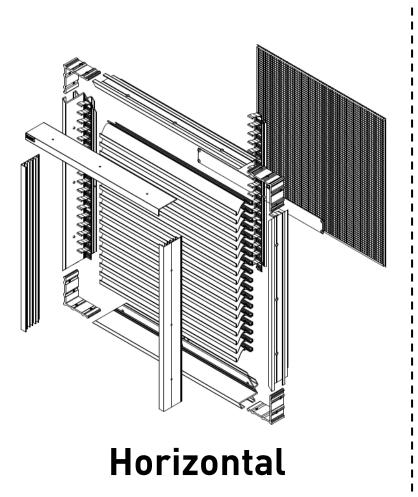


| CONTENTS | | | | |
|----------|---------------|-------|--|--|
| 1. | Exploded view | p. 2 | | |
| 2. | Parts list | p. 3 | | |
| 3. | Product types | p. 7 | | |
| 4. | Cutting jig | p. 10 | | |
| 5. | Mounting | p. 11 | | |



Exploded view





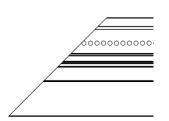
Vertical





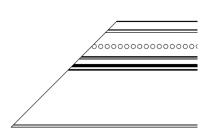
Frame profile F 60HP/28

P1280010 T1280010 - Punched



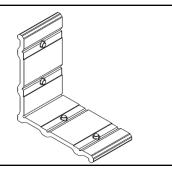
Frame profile G 60HP

P1260010 T1260010 - Punched



Corner bracket DGC F50

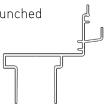
G0009698

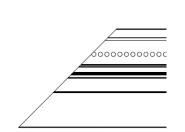


Frame profile F 60HP/32

P1270010

T1270010 - Punched

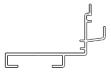


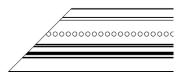


Frame profile N 60HP

P1250010

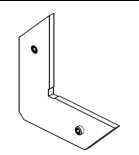
T1250010 - Punched





Flat corner bracket with socket

G0009685



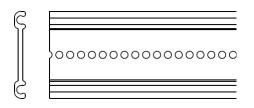


Reinforcement profile 40x5 - punched

T1510985 - Length 985 T1510919 - Length 1985

T1510929 - Length 2985

Txxxxxxx - Project length



Drainage profile DGC60HP - Side

P1240030 - Length 3000

P1240010 - Length 6000



Louvre blade holder

G0140100 - hexagonal

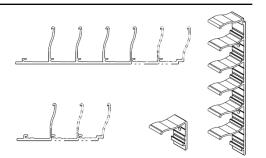
G0140101 - five-way

G0140102 - quadruple

G0140103 - triple

G0140104 - dual

G0140105 - single



Alu flat 40x2mm

P1120210

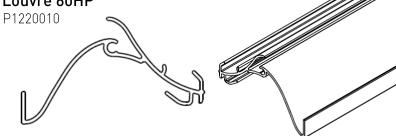


P1516910 - 60/20/1.5

P1519910 - 60/30/1.5

P1519810 - 60/40/1.5



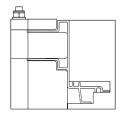




Sawing template for frame F60HP/28

K0002617 + K0002613

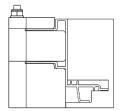
For in-house production only (specific to sawing machine)



Sawing template for frame F60HP/32

K0002616 + K0002613

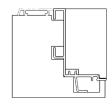
For in-house production only (specific to sawing machine)



Sawing template for frame G/N60HP

K0002601 + K0002600

For in-house production only (specific to sawing machine)



Blind rivet

G0000286 - flat head Ø3.2x8 -ALU/Steel, long mandrel G0000069 - countersunk head, Ø4x12- ALU/Steel G0000065 - flat head, Ø4x12 -



Large fixing dowels

G0009678



Duco logo

ALU/SS

E0000640

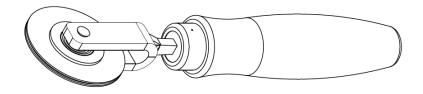




Stainless steel mesh

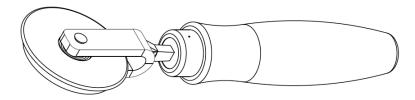
G0000800 - 2.3 x 2.3 mm G0000810 - 6 x 6 mm G0000830 - 20x20 mm

Retractor for stainless steel mesh 2.3 x 2.3 mm $\mbox{K0001000}$



O-ring 3.6 mmG0004060

Retractor for stainless steel mesh 6 x 6 mm K0001001





Product types



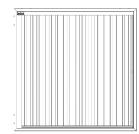
DucoGrille Classic 60HP can be installed in two ways:

- Horizontal
- Vertical

The method of placement must be communicated in advance.

The mounting of a horizontal grille and a vertical grille is similar, but differs in the following points:



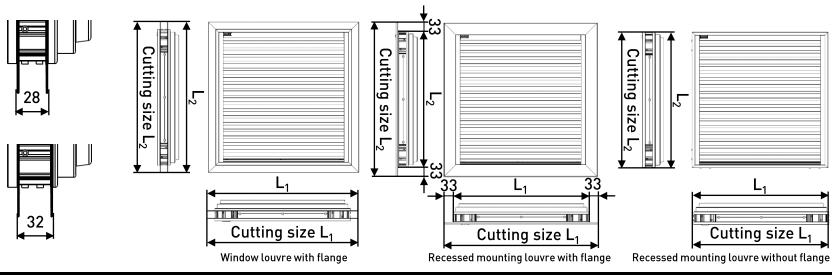


| SUMMARY | HORIZONTAL | | VERTICAL | |
|-------------------|--------------------|-------------|-------------------|------------------|
| L_1 | Width | p. 9 | Height | p. 9 |
| L_2 | Height | p. 9 | Width | p. 9 |
| Drainage | Bottom section | 5.4 - p. 19 | Left side profile | 5.4 - p. 20 - 21 |
| Drainage profiles | 2: 1 left, 1 right | 5.6 - p. 23 | 1: right | 5.6 - p. 23 |

A vertical grille is mounted according to the instructions of a horizontal grille, but is rotated a quarter turn to the left after fitting the L-profile (see 5.7).

Product types





| SUMMARY | F FRAME | G FRAME | N FRAME |
|-------------------------|--|---------------------------------------|---------------------------------------|
| L ₁ (mm) | 240 – 5900 (if L ₂ ≤ 2800) | 185 – 5900 (if L ₂ ≤ 2800) | 185 – 5900 (if L ₂ ≤ 2800) |
| L ₂ (mm) | 255 – 5900 (if L ₁ ≤ 2800) | $200 - 5900$ (if $L_1 \le 2800$) | $200 - 5900$ (if $L_1 \le 2800$) |
| Cutting size L_1 (mm) | = L ₁ | = L ₁ + 66 | = L ₁ |
| Cutting size L_2 (mm) | = L ₂ | = L ₂ + 66 | = L ₂ |
| Calibre | F28: K0002617 + K0002613 F32: K0002616 + K0002613 | K0002601 + K0002600 | K0002601 + K0002600 |

Standard version with insect-repellent mesh (2.3x2.3 mm)^[1].

(1) Other mesh options, on request:

- None
- Vermin-resistant (6x6)
- Bird-resistant (20x20)



Product types



If L_1 is 1000 mm or larger, punched intermediate reinforcements (T15109XX) are installed. If L_2 is 1000 mm or larger, flat intermediate reinforcements (P1120210) are installed. If L_1 and L_2 are both 1000 mm or larger, punched and flat intermediate reinforcements are placed. The number of braces will be calculated in the parts list. Use the table below only as a guide.

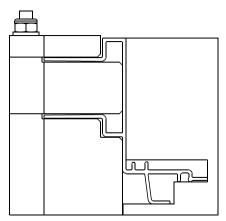
Bracing table

| $\downarrow L_1 \rightarrow$ | L ₁ < 1000 | 1000 ≤ L ₁ < 2000 | 2000 ≤ L ₁ < 3000 | 3000 ≤ L ₁ < 4000 | 4000 ≤ L ₁ < 5000 | 5000 ≤ L ₁ ≤ 5900 |
|------------------------------|-----------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|
| < 1000 | 0 | 1 | 2 | 3 | 4 | 5 |
| 1000 ≤ L ₂ < 2000 | 1 | 1+1 | 2+1 | 3+1 | 4+1 | 5+1 |
| 2000 ≤ L ₂ < 3000 | 2 | 1+2 | 2+2 | 3+2 | 4+2 | 5+2 2800 |
| 3000 ≤ L ₂ < 4000 | 3 | 1+3 | 2+3 | # pun | ched reinforce | ments |
| 4000 ≤ L ₂ < 5000 | 4 | 1+4 | 2+4 | # fl | at reinforceme | nts |
| 5000 ≤ L ₂ ≤ 5900 | 5 | 1+5 | 2+5 0087 | # punched | d + # flat reinfo | rcements |

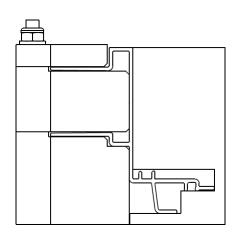


Cutting jig

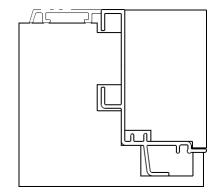




F28 - K0002617 + K0002613 Double mitre saw



F32 - K0002616 + K0002613 Double mitre saw



G/N - K0002601 + K0002600



Mounting

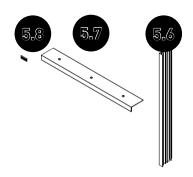


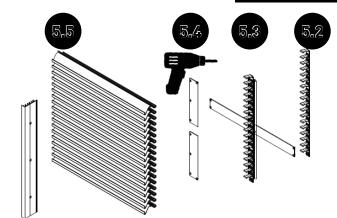
| $L_1 EN L_2 < 1600$ $L_1 < 2000 OF$ $L_2 < 2000$ | $L_1 EN L_2 \ge 1600$ $L_1 OF L_2 \ge 2000$ |
|--|--|
|--|--|

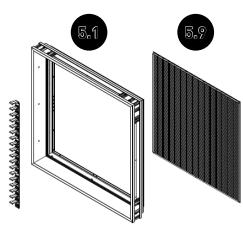
First assemble frame and louvre blade holders (steps 5.1 to 5.3) and then varnish.

Paint parts separately first, then assemble grille.

| | SECTION | PAGE |
|-----|--|---------------|
| 5.1 | Frame | 12 |
| 5.2 | Louvre blade holders | 13 |
| 5.3 | Intermediate bracing (optional) | 14 – 18 |
| 5.4 | Horizontal drainage Vertical drainage | 19 20 – 21 |
| 5.5 | Louvre blades | 22 |
| 5.6 | Drainage profile | 23 |
| 5.7 | L-profile | 24 |
| 5.8 | Logo | 25 |
| 5.9 | Stainless steel mesh | 26 |

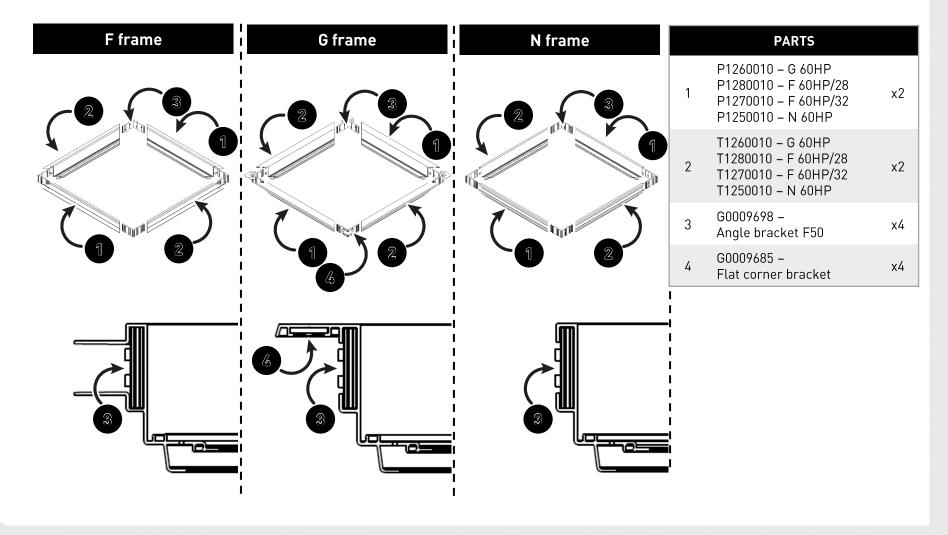






Fitting – Frame





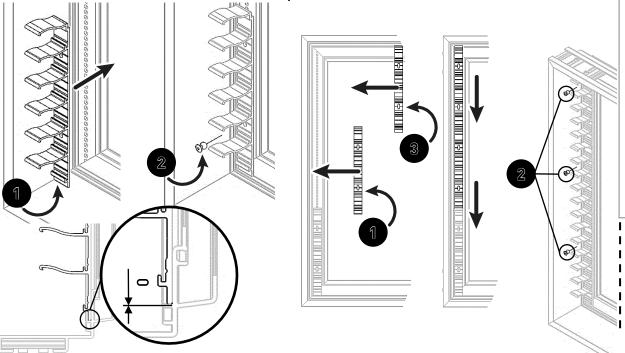


Mounting - Clips



Do the following steps left and right.

- Start with a six-fold louvre blade holder and fix the louvre blade holder in the lower slot with a blind rivet.
- 2. Stack the six-fold louvre blade holders.
- 3. A shortened louvre blade holder comes at the top.
- 4. Check that all louvre blade holders are completely pushed together.
- 5. Fix all louvre blade holders in the top slot with a blind rivet.



| | PARTS | |
|---|---|----|
| 1 | G0140100 - Louvre blade holder sixfold | x2 |
| 2 | G0000286 - Flat bulb head blind rivet 3.2x8 mm | x# |
| 3 | G0140100 - Louvre blade holder sixfold G0140101 - Louvre blade holder fivefold G0140102 - Louvre blade holder quadruple G0140103 - Louvre blade holder triple G0140104 - Louvre blade holder dual G0140105 - Louvre blade holder Single | x# |

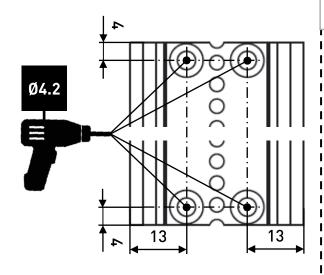


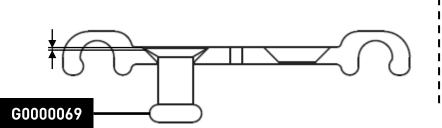




Only for punched reinforcement profiles: if L_1 is greater than or equal to 1000 mm.

- Horizontal grid: L₁ = width.
- Vertical grid: L₁ = height.
- 1. Drill four Ø4.2 mm holes:
 - I. 4 mm from the top,13 mm from the left side
 - II. 4 mm from the top,13 mm from the right side
 - III. 4 mm from the bottom, 13 mm from the left side
 - IV. 4 mm from the bottom,13 mm from the right side
- 2. Countersink the four holes so that the head of the blind rivets(G0000069) is below the flat surface of the reinforcement profile.





PARTS

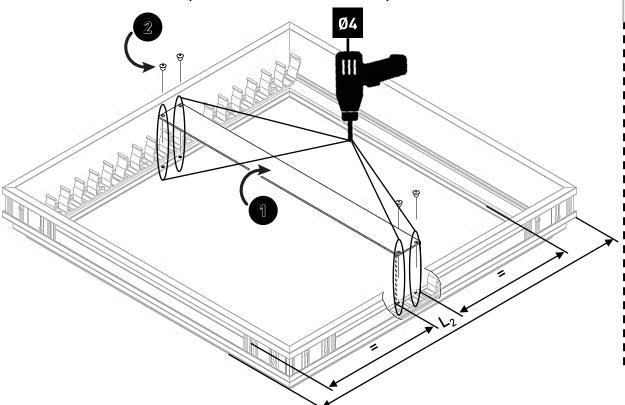
T1510985 / -19 / -29 / Txxxxx punched reinforcement profile





Flat reinforcement profile only

- 1. Lay the reinforcement profiles so that the spacing between all profiles is equal. The spacing can be found in the parts list.
- 2. Drill through the reinforcement profiles and the frame profiles with $\emptyset 4$. Do this twice per side.
- 3. Fix the reinforcement profiles with blind rivets (4/profile).



PARTS

- 1 P1120210 Alu-flat 40x2
- 2 G0000065 Blind rivet 4x12



Only if:

Horizontal

- L1 (width) < 1000 mm
- L2 (height) ≥ 1000 mm

Vertical

- L1 (height) < 1000 mm
- L2 (width) ≥ 1000 mm



Let the framework on its side be fully painted if:

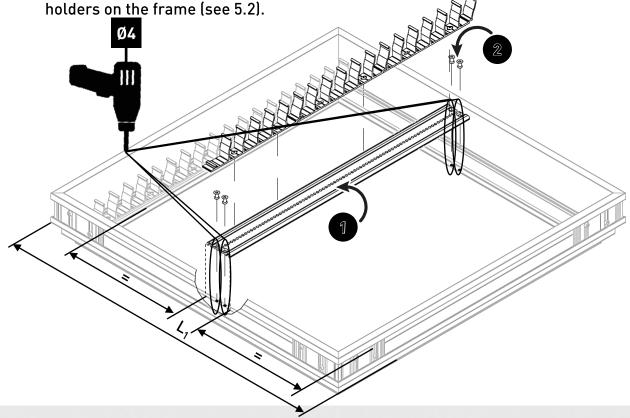
- L_1 an L_2 < 1600 mm
- $L_1 < 2000 \text{ mm}$
- $L_2 < 2000 \text{ mm}$





Punched reinforcement profile only

- 1. Lay the reinforcement profiles so that the spacing between all profiles is equal. The spacing can be found in the parts list.
- 2. Drill through the countersunk holes of the reinforcement profiles with Ø4.
- 3. Fix the reinforcement profiles with blind rivets (4/profile).
- 4. Attach the louvre blade holders to the reinforcement profiles according to the louvre blade



PARTS

- T1510985 / -19 / -29 / Txxxxx punched reinforcement profile
- 2 G0000069 Blind rivet 4x12



Only if:

Horizontal

- L1 (width) ≥ 1000 mm
- L2 (height) < 1000 mm

Vertical

- L1 (height) ≥ 1000 mm
- L2 (width) < 1000 mm



Let the framework on its side be fully painted if:

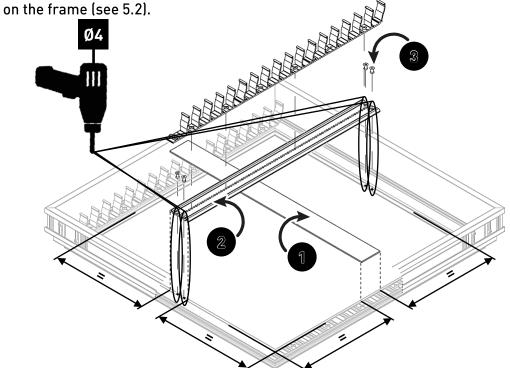
- L_1 and L_2 < 1600 mm
- $L_1 < 2000 \text{ mm}$
- L₂ < 2000 mm





Flat and punched reinforcement profile

- 1. Lay the flat reinforcement profiles so that the spacing between all profiles is equal. The spacing can be found in the parts list.
- 2. Lay the punched reinforcement profiles so that the spacing between all profiles is equal. The spacing can be found in the parts list.
- 3. Drill through the countersunk holes of the punched reinforcement profiles with Ø4.
- 4. Fix the punched reinforcement profiles with blind rivets (4/profile).
- 5. Attach the louvre blade holders to the reinforcement profile according to the louvre blade holders



PARTS

- 1 P1120210 Alu-flat 40x2
- 2 T1510985 / -19 / -29 / Txxxxx punched reinforcement profile
- 3 G0000069 Blind rivet 4x12



Only if

- L1 ≥ 1000 mm
- L2 ≥ 1000 mm

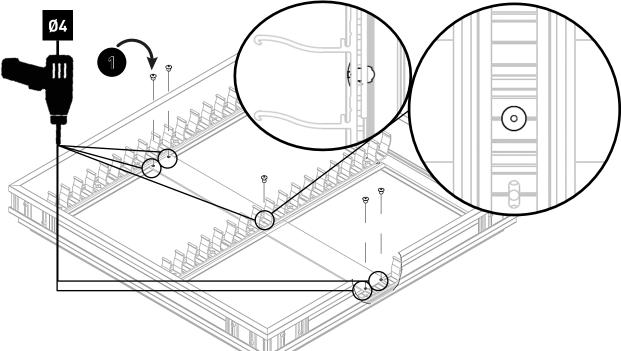
Continue to the next page.





Flat and punched reinforcement profile 6. At a junction of both reinforcement profiles, drill a Ø4 hole into the groove

- in the louvre blade holder according to the drawing.
- 7. Fix the reinforcement profiles with a blind rivet.
- 8. Drill through the flat reinforcement profiles and the frame profiles with Ø4. Do this twice per side.
- 9. Fix the flat reinforcement profiles with blind rivets (4/profile).



PARTS

G0000065 - Blind rivet 4x12



Only if

- L1 ≥ 1000 mm
- L2 ≥ 1000 mm



Let the framework on its side be fully painted if:

- L_1 and L_2 < 1600 mm
- $L_1 < 2000 \text{ mm}$
- $L_2 < 2000 \text{ mm}$



Assembly - horizontal drainage





Only for horizontal grilles.

Take care to ensure that you drill through only 1 wall.

- 1. Drill a Ø6 hole at the indicated location of the bottom profile at 30 mm from each side, 2 mm deep.
- 2. Drill additional holes in the same groove. The number will depend on the width.
- 3. Space the extra holes evenly over the length. Observe the following rules when doing so:
 - Drill just next to the clip if a hole is required at the clip of a vertical intermediate reinforcement.
 - A maximum of 300 mm between two successive holes.
- A minimum of three holes.

 Ø6 2 mm deep

 Max. 300

 Max. 300

 Max. 300



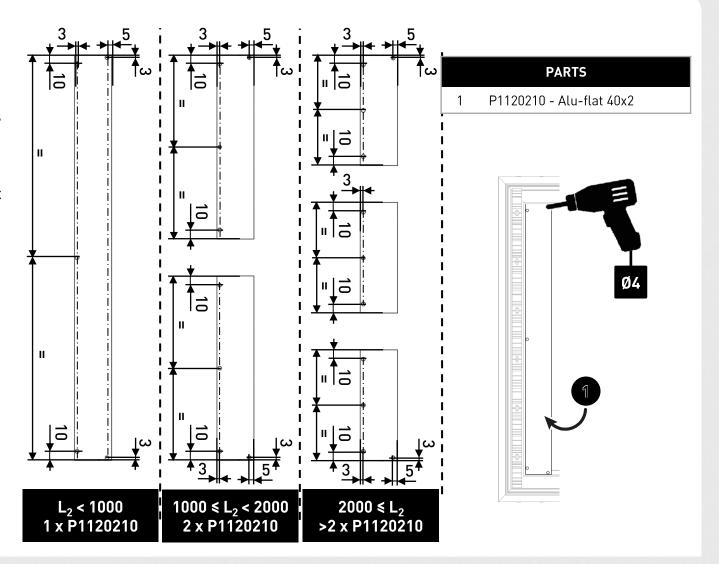
Assembly - vertical drainage





Only for vertical grilles.

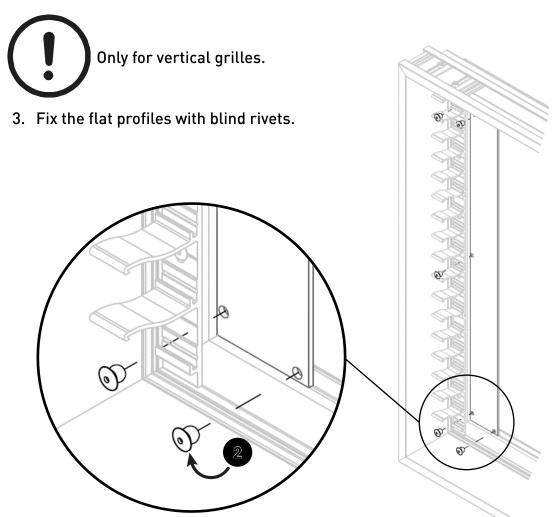
- 1. Place the flat profiles against the left side profile between the frame profiles and the flat reinforcement profiles.
- 2. Drill Ø4 holes according to the instructions shown.





Assembly - vertical drainage





PARTS

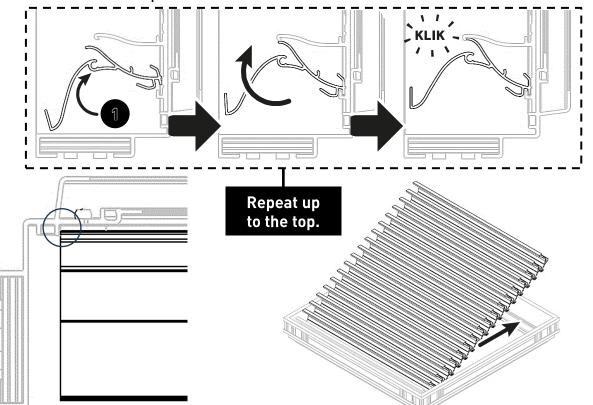
1 G0000065 - Blind rivet 4x12



Mounting – Louvres



- 1. Fix the bottom louvre following the steps shown.
- 2. Ensure the louvre is positioned centrally in the frame.
- 3. Attach the rest of the louvre blades following the steps shown from bottom to top.



PARTS

1 P1220010 – Louvre 60HP x#



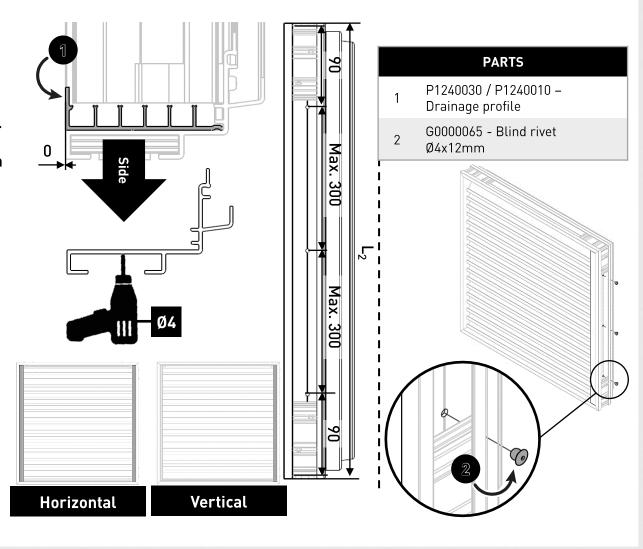
Mounting - Drainage profiles





Vertical grid: Do this only on the right side.

- 1. Put the drainage profile in the middle of the right side profile.
- 2. Drill a Ø4 hole at 90 mm from the top and a Ø4 hole at 90 mm from the bottom in the groove of the side profile shown.
- 3. If the spacing between two holes is greater than 300 mm, then drill extra holes such that the spacing between them never exceeds 300 mm. Space the extra holes evenly over the length.
- 4. Fix the drainage profile with blind rivets.
- 5. ! Only for horizontal grating: put the drainage profile in the middle of the left side profile and repeat steps 2 to 4.



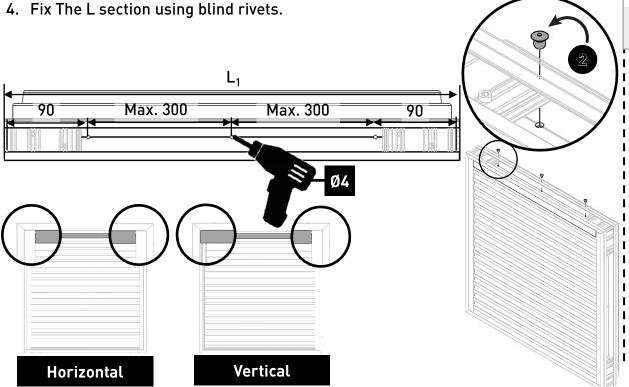


Mounting - L-profile



х#

- 1. Put the L-profile in the correct position.
- 2. Drill a Ø4 hole at 90 mm from each side in the groove of the top profile shown.
- 3. If the spacing between two holes is greater than 300 mm, then drill extra holes such that the spacing between them never exceeds 300 mm. Distribute the extra holes evenly along the length of the frame profile.

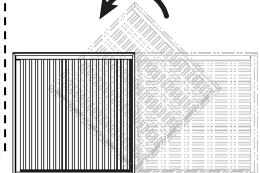


P1516910 - 60/20/1.5 1 P1519910 - 60/30/1.5 x1 P1519810 - 60/40/1.5

PARTS

G0000065 - Blind rivet Ø4x12mm

Turn a vertical grid a quarter turn to the left after this step.



Mounting – Logo

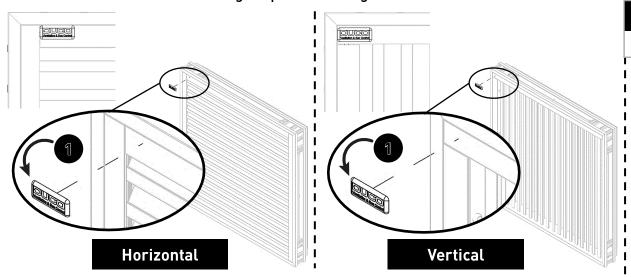


x1

PARTS

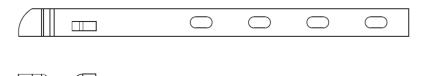
E0000640 - Duco logo

1. Affix a self-adhesive Duco logo top left on the grille.



2. Enter the required number of sets of fixing lugs according to the grid dimensions:

 $\# = \frac{(Height + Width) \times 2}{4000}$. The correct quantity will be calculated in the parts list.



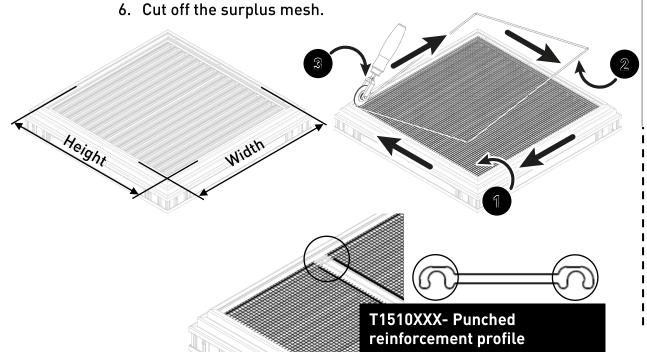


Mounting – Stainless steel mesh





- 1. Measure the height and width of the rear face of the frame.
- 2. Cut the mesh to size. Allow for an extra 10 mm in height and width each time.
- The dimensions of the mesh can also be found in the parts list.
- 3. Mount the mesh on the rear face in the middle of the grille.
- 4. Press the 0-ring into the groove provided using the roll-in tool.
- 5. Start top left and continue clockwise.



PARTS

- G0000800 stainless steel 2.3 x 2.3
- G0000810 stainless steel 6 x 6
 - G0000830 stainless steel 20 x 20
- 2 G0004060 O-ring 3.6mm
 - K0001000 Roll-in tool for insect-resistant stainless steel mesh (G0000800)
 - K0001001 Roll-in tool for vermin-resistant Stainless steel mesh (G0000810)

For punched reinforcement profiles the mesh and 0-ring are interrupted at the reinforcement profiles.

MI DucoGrille Classic 60HP 22.12.23