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LUXALON®
A **HunterDouglas®** PRODUCT

SYSTEM OVERVIEW MULTI-PANEL SYSTEM


SHORT SYSTEM DESCRIPTION

The Luxalon® Multi-Panel Ceiling System consists of box-shaped panels in 5 varying widths (30 mm up to 180 mm).

All panels (1 to 5) can be clipped to a universal multi-panel carrier, creating the opportunity to use panels with different widths and heights (15 mm and 39 mm) in one ceiling. The stove enamelled aluminium panels and joins are recyclable, lightweight and strong. The panels are made to measure and can be supplied in any length up to 6000 mm. Panels can be joined by using a panel splice (12).

Between the panels there is an open joint of 20 mm, which can be filled with a recessed V-shaped (6) or a U-shaped join (7). Join profiles can be simply inserted in the open joint by hand, without additional tools

The panel carrier (9) is black, made of 0.5 mm thick stove enamelled steel or 0.95 mm thick stove enamelled aluminium and is provided with prongs to accommodate the panels in a module of 50 mm or a multiple of this module. Carriers have a standard length of 5000 mm and are joined by using the carrier splice (11).

The Luxalon® standard range of edge profiles can be used for perimeters.
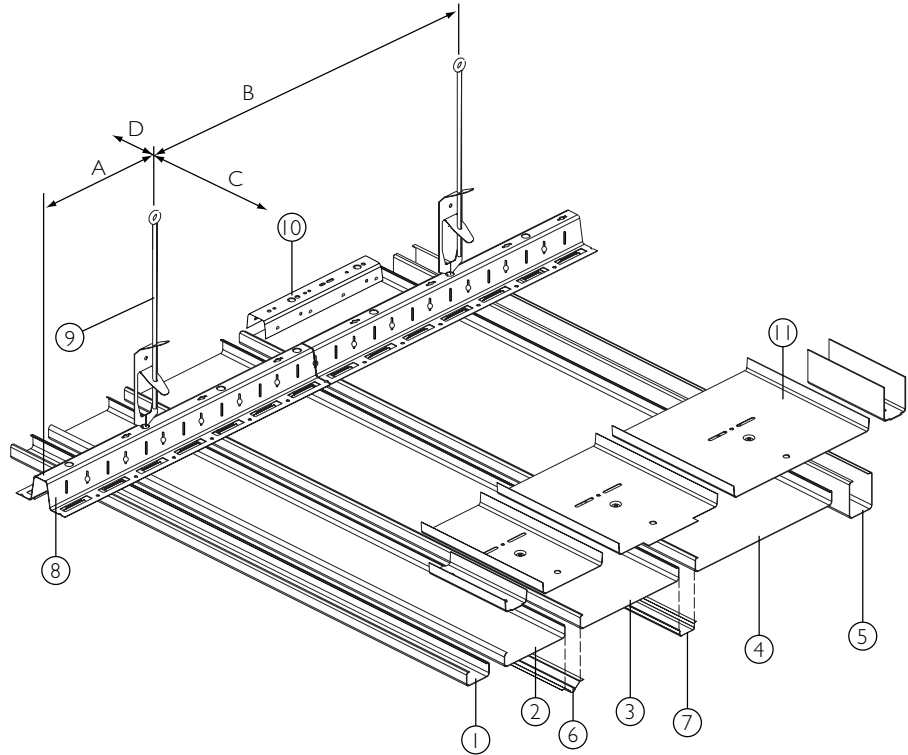
PRACTICAL APPLICATIONS

- Panel length made to measure up to 6000 mm, allowing swift installation and reducing the need for joining the panels to a minimum.
- Between the panels there is an open joint of 20 mm, which can be closed with recessed V- or U-shaped join profiles. The panels combined with join profiles provide a visually closed ceiling.
- Open joint systems for all applications requiring up to 20% open area (for ventilation, acoustics, etc.)
- Optimal acoustic control for office spaces, meeting rooms etc. can be achieved by using perforated panels with a non-woven textile membrane bonded to the inside face.
- By combining the narrow and wide panels on one carrier, various dimensional effects are possible. These effects can be enhanced by incorporating different colours from our extensive standard range.
- Flexible carriers are available in order to create curved ceilings.
- The Multi-Panel system is suited for creating radial ceilings by using unpronged carriers and special panel clips.

1 = 30B panel		7 = Recessed U-join profile	
2 = 80B panel		8 = Multi-Panel Carrier	
3 = 130B panel		9 = Hanger	
4 = 180B panel		10 = Carrier splice	
5 = 30BD panel		11 = Panel splice	
6 = Recessed V-join profile			

MAXIMUM SPANS

Panel type	Carrier span (mm)		Panel span (mm)			
			on 2 carriers		on 3 or more carriers	
	A	B	C*	D	C*	D
30BD	300	1700	2500	150	2500	150
30B/80B	300	1700	1550	150	1850	150
130B	300	1700	1450	150	1550	150
180B	300	1700	1350	150	1450	150

Minus 200 mm in case of acoustic pads.

DIMENSIONS & WEIGHTS

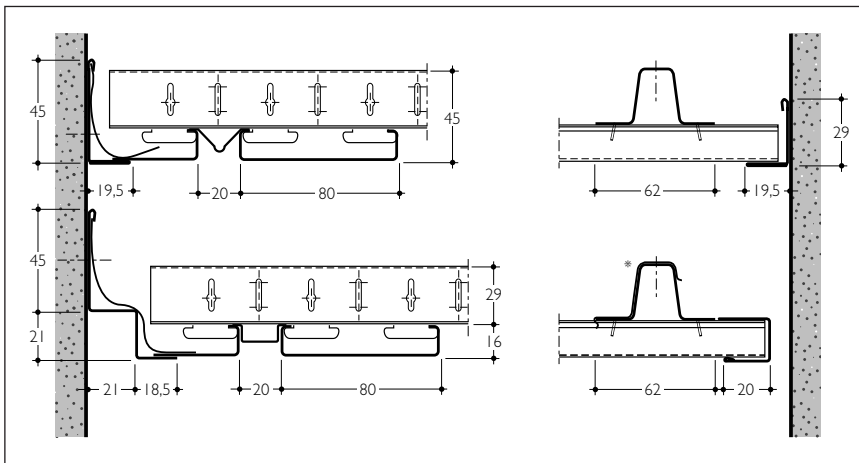| Panel type	30BD	30B	80B	130B	180B
Thickness	0.5	0.35	0.5	0.5	0.6
Width	30	30	80	130	180
Module	50	50	100	150	200
Depth	39	15	15	15	15
Min. length	800	800	800	800	800
Max. length*	6000	6000	6000	6000	6000
Weight/m²:					
- excl. join profiles, incl. steel carrier**	3.2 kg	1.5 kg	1.8 kg	1.8 kg	2.1 kg
- incl. join profiles, incl. steel carrier**	3.8 kg	2.1 kg	2.1 kg	2.0 kg	2.2 kg

*   *Panels > 6000 mm available on request.*
** *Based on panels installed on 3 or more carriers.*

Dimensions
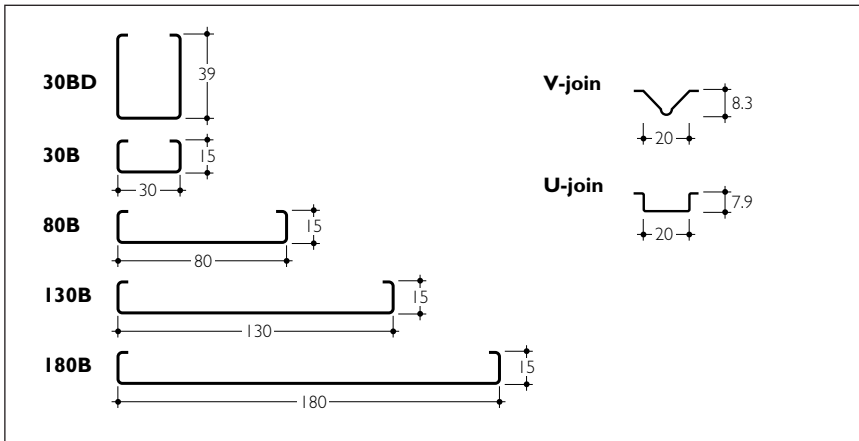
Standard construction details

** Luxalon® fix clip should be used in combination with an adaptor panel.*

Material Requirement per m²

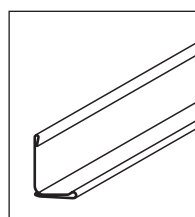|	Unit	30BD	30B	80B	130B	180B
Panels	lm	20	20	10	6.67	5
Join profiles	lm	20	20	10	6.67	5
Carrier	lm	0.4	0.55	0.55	0.65	0.69
Carrier splice	pcs	0.08	0.11	0.11	0.13	0.14
Suspension	pcs	0.24	0.32	0.32	0.38	0.41

Edge profiles and other accessories depend on individual project requirements.
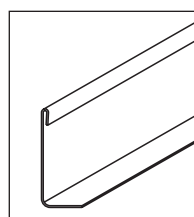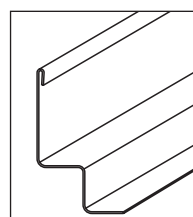*Figures are based on maximum spans.*

Edge profiles
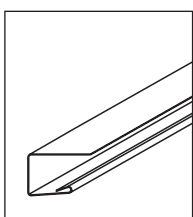
Clip-on U-profile alu
(28.6 x 16 x 20)

Wall L-profile alu
(29.2 x 19.4)

Wall L-profile Fe/Alu
(45 x 18.5)

Wall W-profile Fe/Alu
(45 x 21 x 21 x 18.5)

Plenum Accessibility

The Luxalon® Multi-Panel System allows total acces to the ceiling void. Installed on a visually hidden suspension system, each individual panel can easily be demounted by unclipping the edge of the panel from the prong of the carrier. This is done by hand, without the use of additional tools. In case of recessed U-shaped or Softwave join profiles, these first need to be removed. In case of recessed V-shaped join profiles, these can remain in place.

Exterior Application

The Luxalon® 80B ceiling is also available for exterior applications. See separate brochure for further details.

Material Specifications

- Base Material
Luxalon® Multi-Panel ceiling panels are rollformed from 0.35 mm (30B), 0.5 mm (30BD / 80B / 130B) or 0.6 mm (180B) thick prepainted stove enamelled aluminium strip. All aluminium products can be recycled for the full 100%, requiring very little energy.

- Coating
The tough and durable 2-layer polyester coilcoating finish in a nominal thickness of 20 microns, is stove enamelled in a continuous coil-coating process ensuring uniform coating thickness and absolute adhesion.

- Luxalon® colour range
The standard Luxalon® colour range for Multi-Panel includes different colours and finishes. See Luxalon® colour chart. Any other (RAL or NCS) colour is available on request.

- Fire Behaviour
Luxalon® metal suspended ceilings are classified incombustible and will therefore not contribute to possible fires. When ceilings however need to protect the structural integrity of the building, Luxalon® ceilings offer a range of practical and tested solutions with regards to fire resistance and fire stability. Further information is available on request.

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ACOUSTIC PERFORMANCE

In order to improve interior sound control, the Luxalon® panels can be supplied perforated. As a standard feature, perforated panels can be supplied with a soundabsorbing non-woven tissue glued into the panel for enhanced acoustical performance.

- PERFORATION OPTIONS

| Panel type	30BD	30B	80B	130B	180B
Ø 1.0 mm and Δ 2 mm with 23% open area	•	N.A.	•	N.A.	N.A.
Ø 2.0 mm and Δ 5 mm with 16% open area	•	N.A.	•	•	•

⇕ panel direction
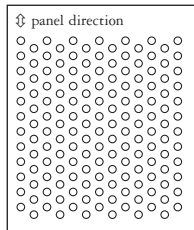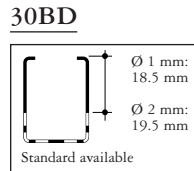
⇕ panel direction

Ø 1.0 mm
30BD/80B
⇕ 2 ⇔ 3.46
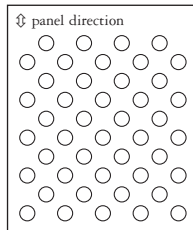
Ø 2.0 mm
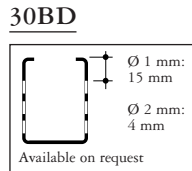30BD/80B/130B/180B
⇕ 8.66 ⇔ 5

Note: Panels have a nominal plain border along the longitudinal panel direction in order to a assure maximum flatness and product stability: 5 mm for 80B panel Ø 1 mm and 4 mm for 80B/130B/180B, Ø2 mm
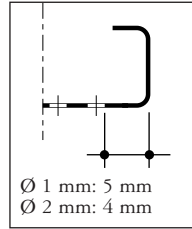
Ø 1 mm: 5 mm
Ø 2 mm: 4 mm

30BD

Ø 1 mm: 18.5 mm
Ø 2 mm: 19.5 mm

Standard available

30BD

Ø 1 mm: 15 mm
Ø 2 mm: 4 mm

Available on request

- CURVE 1 (Ø 2.0 MM)
2.0 mm perforated panels, provided with 0.2 mm thick, black non-woven acoustic tissue, open joins 20 mm, all modules. Plenum depth is 160 mm

- CURVE 2 (Ø 2.0 MM)
2.0 mm perforated panels, provided with 0.2 mm thick, black non-woven acoustic tissue, closed joins 20 mm, all modules. Plenum depth is 160 mm

- CURVE 3 (Ø 1.0 MM OR Ø 2.0 MM)
1.0 mm or 2.0 mm perforated panels, provided with 25 mm thick mineral wool pad with a density of 22 kg/m³., open joins 20 mm, module 100 mm. Plenum depth is 160 mm

- CURVE 4 (PLAIN)
Plain panels, provided with 25 mm thick mineral wool pad with a density of 22 kg/m³., open joins 20 mm, module 100 mm. Plenum depth is 160 mm

These Multi-Panel ceilings were tested by TNO Delft (The Netherlands). An independent official testing institute, reports: 806.469, TPD-HA6-RPT-920038/920039.
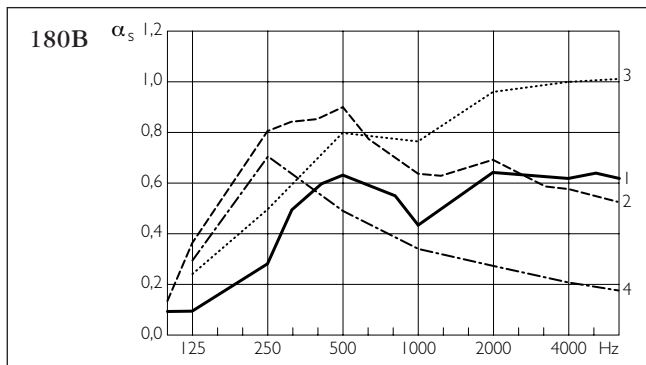
- SOUND ABSORPTION DATA
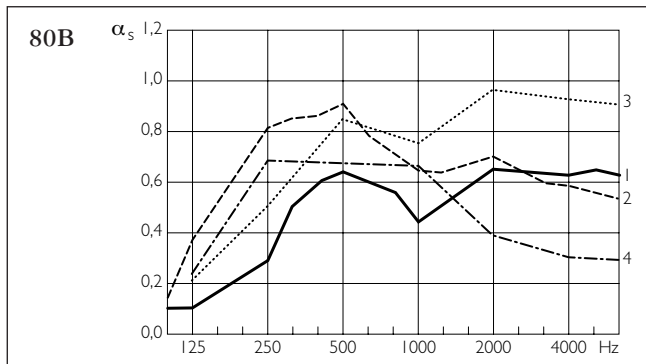
80B

Freq. Hz.	125	250	500	1000	2000	4000
Curve 1	0.09	0.28	0.64	0.43	0.65	0.62
Curve 2	0.37	0.81	0.91	0.65	0.70	0.58
Curve 3	0.21	0.51	0.85	0.76	0.96	0.92
Curve 4	0.24	0.68	0.67	0.66	0.39	0.32
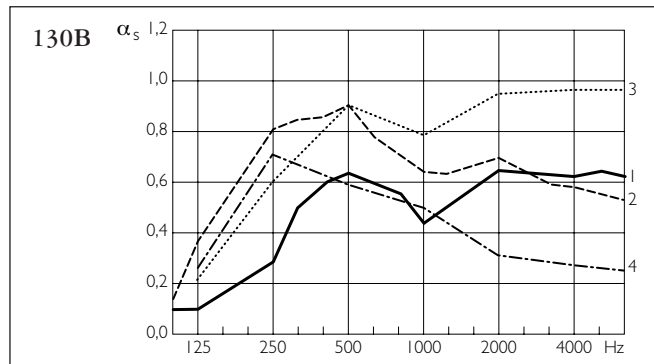
130B

Freq. Hz.	125	250	500	1000	2000	4000
Curve 1	0.09	0.28	0.64	0.43	0.65	0.62
Curve 2	0.37	0.81	0.91	0.65	0.70	0.58
Curve 3	0.21	0.60	0.90	0.78	0.96	0.97
Curve 4	0.26	0.71	0.59	0.48	0.32	0.26

αs = soundabsorption degree: an absorption of 1.0 indicates a 100% absorption of sound.

180B

Freq. Hz.	125	250	500	1000	2000	4000
Curve 1	0.09	0.28	0.64	0.43	0.65	0.62
Curve 2	0.37	0.81	0.91	0.65	0.70	0.58
Curve 3	0.23	0.50	0.80	0.77	0.96	1.00
Curve 4	0.29	0.71	0.47	0.34	0.27	0.21

30BD
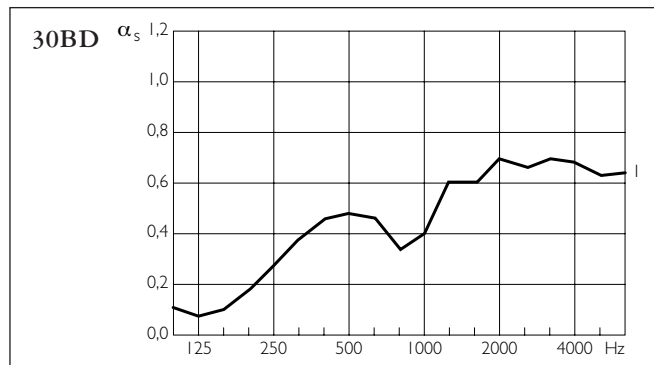
Freq. Hz.	125	250	500	1000	2000	4000
Curve 1	0.07	0.26	0.46	0.40	0.69	0.67

LUXALON® MULTI PANEL SYSTEM SPECIFICATIONS

PART 1. MULTI PANEL SYSTEM GENERAL

1.1 INTRODUCTION
Supply and fix Luxalon® Multi-Panel System as manufactured by
Hunter Douglas Architectural Products.

1.2 DESCRIPTION OF THE SYSTEM
The system will consist of box-shaped linear panels fixed to an adjustable
suspension system which allows for individual panels to be removed by
hand. System to feature open joins between the panels that can optionally
be closed by clipping in join profiles. Panels of different widths can be
combined in one ceiling.

PART 2. PRODUCT
_____ m² Luxalon® Multi-Panel Ceiling, featuring a 20 mm open join
and consisting of:

2.1 PANELS
- 30B, size 30 x 15 mm, rollformed from 0.35 mm Aluminium strip
- 80B, size 80 x 15 mm, rollformed from 0.5 mm Aluminium strip
- 130B, size 130 x 15 mm, rollformed from 0.5 mm Aluminium strip
- 180B, size 180 x 15 mm, rollformed from 0.6 mm Aluminium strip
- 30BD, size 30 x 39 mm, rollformed from 0.5 mm Aluminium strip

JOIN PROFILES
- Recessed V-shaped join profile, width 20 mm, manufactured from
  0.2 mm Aluminium
- Recessed U-shaped join profile, width 20 mm, manufactured from
  0.2 mm Aluminium

Panels to be manufactured from prepainted, stove enamelled aluminium,
alloy EN-AW-5050 or equivalent (according to EN 1396 and ECCA).

Join profiles to be manufactured from prepainted, stove enamelled
aluminium, alloy EN-AW-6011.

Panels have square sides and are plain/perforated (except 30B),
with/without non-woven acoustic textile. Panels to have a length of
_____ mm (manufacturer availability 800-6000 mm and on request
> 6000 mm). Panels to be coupled in longitudinal direction by means of
panel splices.

Join profiles to allow for easy clipping into the open joint, without the
use of additional tools.

2.2 SUSPENSION
Rows of 0.5 Fe/0.95 Alu rollformed carriers shall be installed at
_____ centre on centre by means of adjustable suspensions at a
distance of _____, centre on centre. Carriers will be joined by means
of carrier splices. Carriers provided with prongs to hold panels in a
module which is a multiple of 50 mm.

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Part 3. Additional Specifications

3.1 Perimeter Profiles
- Clip-on U-profile 28.6 x 16 x 20 mm, made of 0.35 mm thick aluminium
- Wall L-profile 29.2 x 19.4 mm made of 0.5 mm thick aluminium
- Wall L-profile 45 x 18.5 mm made of 0.8 mm thick steel/aluminium
- Wall W-profile, 45 x 21 x 21 x 18.5 mm, made of 0.8 mm steel/aluminium

3.2 Perforations
Manufacturer shall supply Luxalon® Multi-Panel panels with following perforation specifications:
- Ø 1.0 mm, Δ 2 mm with 23% open area: for 30BD and 80B panels
- Ø 2.0 mm, Δ 5 mm with 16% open area: for 30BD, 80B, 130B and 180B panels

Perforated panels to have a nominal plain border along the longitudinal panel direction to assure a maximum flatness and product stability:
- 80B panel, Ø1 mm perforated to have a plain border of 5 mm
- 80B, 130B and 180B panel, Ø2 mm perforated to have a plain border of 4 mm
- 30BD panels are perforated into the sides of the panels over a heigth of 18.5 mm for Ø 1 mm and a heigth of 19.5 mm for Ø 2 mm.

3.3 Acoustics
Manufacturer shall supply acoustic non-woven tissue, thickness 0.2 mm factory applied inside the panels. Alternatively the installer can place individually PE wrapped mineral wool pads.

3.4 Coating
Architect will make a colour selection from the standard Hunter Douglas colour range for Luxalon® Multi-Panel panels code no. _____ or a special colour will made to match.

The coating will consist of a tough and durable 2-layer polyester finish in nominal thickness of 20 microns, applied in a continuous coil-coating process ensuring uniform coating and absolute adhesion.

3.5 Installation
All materials shall be installed in strict compliance with all local codes, ordinances and manufacturers recommandations including specific additional requirements as may be called for in the specifications or shown on the drawings.

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