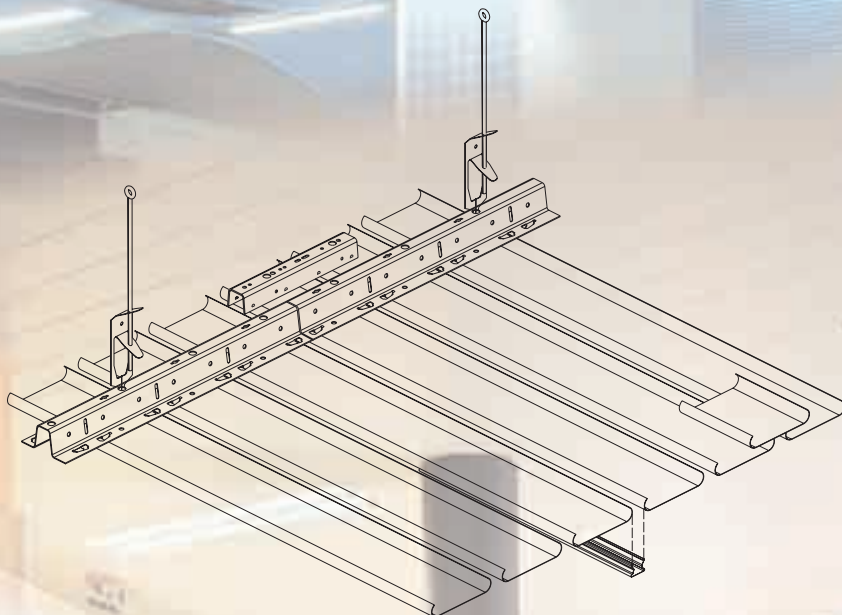


**LUXALON**<sup>®</sup>  
ARCHITECTURAL PRODUCTS

**LINEAR 84R CEILING SYSTEM**

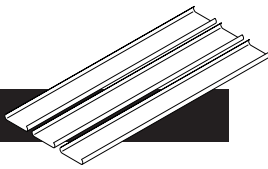


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**LUXALON**<sup>®</sup>  
A HunterDouglas<sup>®</sup> PRODUCT

# LINEAR



## SYSTEM OVERVIEW 84R SYSTEM

### SHORT SYSTEM DESCRIPTION

The Luxalon® 84R ceiling system consists of round edged panels (1) which can be easily clipped on a 84R carrier (3). The stove enamelled aluminium panels are recyclable, light-weight 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 the panel splice (6).

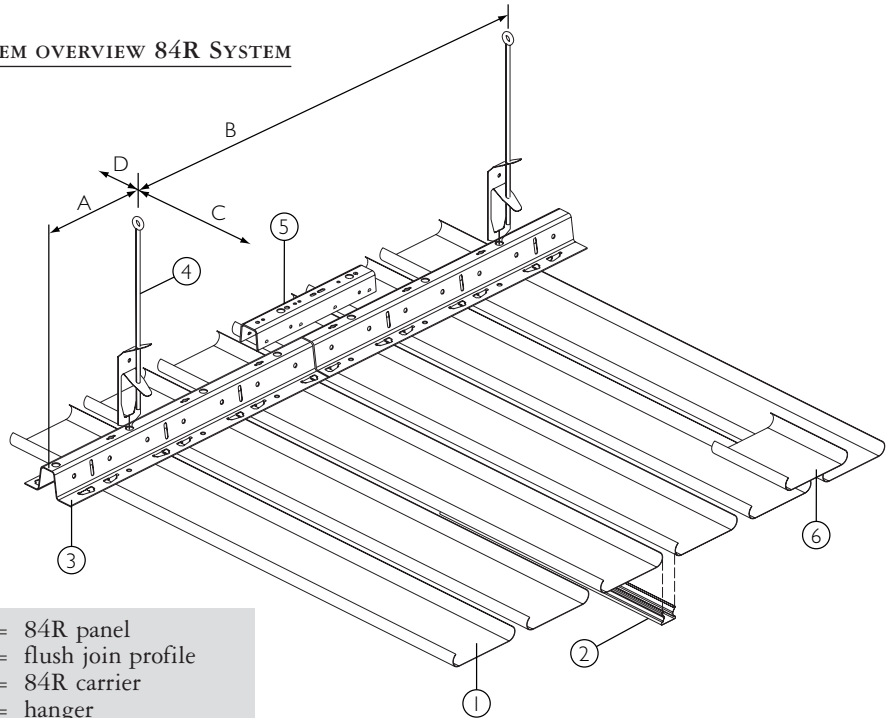
Between the panels there is an open joint of 16 mm, which can be filled with a 16 mm wide flush join profile (2) to form a flush closed ceiling appearance. Join profiles can be simply inserted in the open joint by hand, without using any tools.

The panel carrier (3) 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 standard module of 100 mm. All carriers have a standard length of 5000 mm and are connected by using the carrier splice (5).

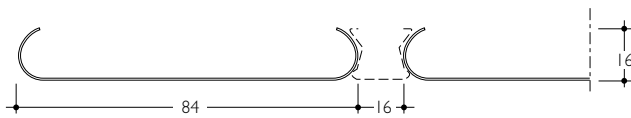
The Luxalon® standard range of edge profiles can be used as perimeters.

### PRACTICAL APPLICATIONS

- Panel length made to measure up to 6000 mm, allowing for swift installation and reducing the need for joining the panels to a minimum.
- The panels can be easily removed and replaced by hand allowing easy and full access to services and installations in the plenum.
- Between the panels there is an open joint of 16 mm, which can be closed with flush join profiles. The panels combined with join profiles, provide a visually closed ceiling.
- Open joint systems for all applications can achieve up to 16% open area (for ventilation, acoustics etc.).
- Enhanced acoustic control for offices, meeting rooms etc. can be achieved by using perforated panels with a non-woven textile membrane bonded to the inside face.
- To achieve modules between 93 and 150 mm (with joints of 9 up till 66 mm), non-standard carriers are available (steel or aluminium).
- 84R system is suited for creating radial ceilings by using unpronged carriers and special panel clips.
- Curved ceilings can be achieved by using the 84R flexible carrier, or by curving the 84R panels. See separate brochure for curved 84R panels.



- 1 = 84R panel
- 2 = flush join profile
- 3 = 84R carrier
- 4 = hanger
- 5 = carrier splice
- 6 = panel splice



### MAXIMUM SPANS

Panel type	Carrier span (mm)		Panel span (mm)			
	A	B	on 2 carriers		on 3 or more carriers	
			C*	D	C*	D
84R	300	1700	1500	150	1700	150

\* Minus 200 mm in case of acoustic pads.

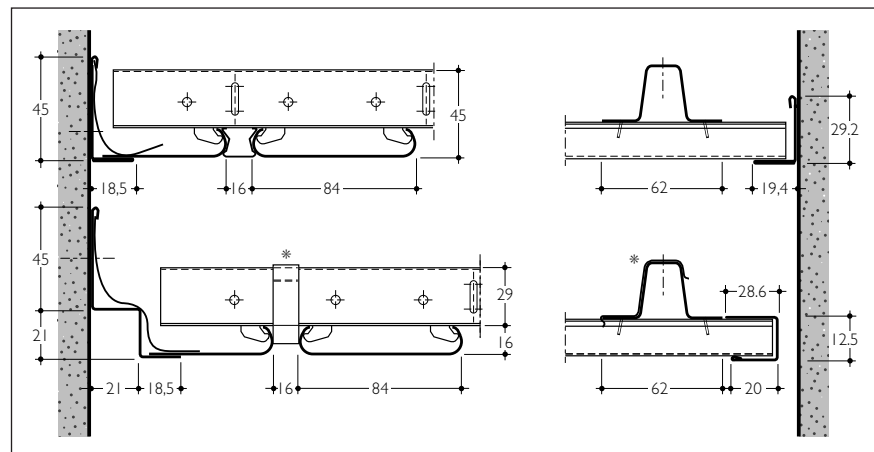
### DIMENSIONS & WEIGHTS

Panel	Width (mm)	Module (mm)	Min. length (mm)	Max. length (mm)	Weight panels & carriers/m <sup>2</sup> *			
					Steel carrier		Alu. carrier	
					Excl. joints	Incl. joints	Excl. joints	Incl. joints
84R	84	100	1000	6000	1.8 kg	2.3 kg	1.7 kg	2.2 kg

\* Based on panels installed on 3 or more carriers

Panels from 250 - 1000 mm and >6000 mm are available on request.

### STANDARD CONSTRUCTION DETAILS



\* Luxalon® fixing clip is to be used in combination with an adaptor panel.

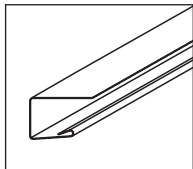
## MATERIAL REQUIREMENT PER M<sup>2</sup>

	Unit	Linear 84R system
Panels	lm	10
Join profiles	lm	10
Carriers	lm	0.59
Carrier splice	pc	0.12
Suspension	pc	0.35

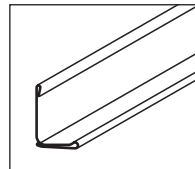
The required number of components depend on individual project requirements

Figures are based on maximum spans

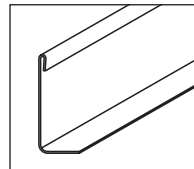
## EDGE PROFILES



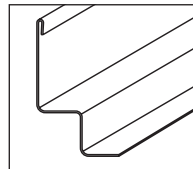
Clip-on U-profile alu  
(28.6 x 19 x 20)



Wall L-profile alu  
(29.2 x 19.4)



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



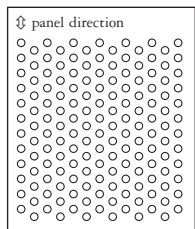
Wall W-profile Fe/Alu  
(45 x 21 x 21 x 18.5)

## ACOUSTIC PERFORMANCE

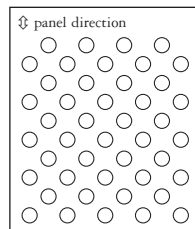
In order to improve interior sound control, the Luxalon® 84R panels can be perforated. As a standard feature, perforated panels can be supplied with a soundabsorbing non-woven tissue glued into the panel for enhanced acoustical performance.

### - PERFORATION OPTIONS

- Flush join profile is available with ventilation holes dimensions 3 x 7 mm, c.o.c. 10.5 mm
- 84R panels are available in 2 standard perforation patterns:

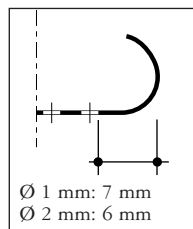


Ø 1.0 mm  
⇄ 2 ⇄ 3.46

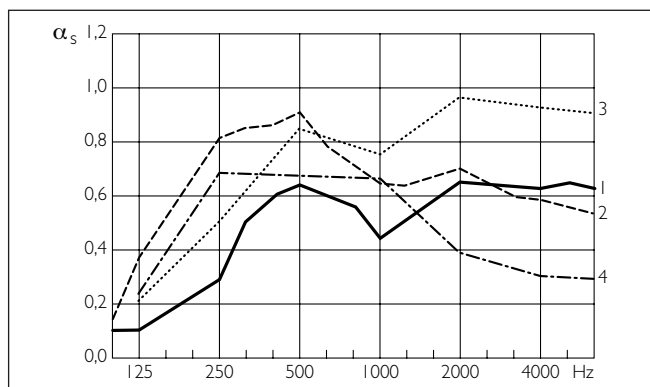


Ø 2.0 mm  
⇄ 8.66 ⇄ 5

Note: panels have a nominal plain border along the longitudinal panel direction in order to assure maximum flatness and product stability:  
7 mm for Ø 1 mm and 6 mm for Ø 2 mm.



### - SOUND ABSORPTION DATA



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

α<sub>s</sub> = soundabsorption degree: an absorption of 1.0 indicates a 100% absorption of sound.

## PLENUM ACCESSIBILITY

The Luxalon® 84R system allows for easy demounting of the panels and flush joints. Installed on a visually hidden suspension system, each panel can be easily removed and replaced by hand allowing easy and full access to services and installations in the plenum.

## EXTERIOR APPLICATION

The Luxalon® 84R ceiling is also available for exterior applications. See separate brochure for further details.

## MATERIAL SPECIFICATIONS

### - BASE MATERIAL

Luxalon® 84R panels are rollformed from 0.5 mm 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 polyester finish in a nominal thickness of approximately 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 84R includes a wide range of 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.

### - CURVE 1

Acoustic panels, perforated Ø 2 mm, with non-woven acoustic tissue glued in, open joints 16 mm, module 100 mm, plenum depth 160 mm.

### - CURVE 2

Acoustic panels, perforated Ø 2 mm, with non-woven acoustic tissue glued in, closed with join profiles, module 100 mm, plenum depth 160 mm.

### - CURVE 3

Perforated panels, perforated Ø 1 mm or Ø 2 mm, open joints 16 mm, plenum depth 160 mm, plus additional 20 mm thick mineral wool pads with a density of approx. 22 kg/m<sup>3</sup>.

### - CURVE 4

Plain panels, open joints 16 mm, module 100 mm, plenum depth 160 mm, plus additional 20 mm thick mineral wool pads with a density of approx. 22 kg/m<sup>3</sup>.

These figures are partly based on the 80B testresults which can be assumed as being equal for 84R. 80B ceilings were tested by TNO Delft (The Netherlands), an independent official testing institute. Report no: 806.469, TPD-HAG-RPT-920038/920039/007293.



## LUXALON® 84R SYSTEM SPECIFICATION

### PART 1. 84R SYSTEM GENERAL

#### 1.1 INTRODUCTION

Supply and fix Luxalon® 84R system as manufactured by Hunter Douglas Architectural Products.

#### 1.2 DESCRIPTION OF THE SYSTEM

The system will consist of linear panels with round edges fixed to an adjustable suspension system which allows for individual panels to be removed by hand. System to feature open joints between the panels that can optionally be closed by clipping in flush join profiles.

### PART 2. PRODUCT

\_\_\_\_\_ m<sup>2</sup> Luxalon® 84R ceiling, featuring a 16 mm joint and consisting of:

#### 2.1 PANELS

Panels, 84 mm wide, 16 mm deep, to be rollformed from 0.5 mm thick stove enamelled aluminium strip, plain/perforated with/without non-woven acoustic textile.

#### JOIN PROFILES

- Flush join profiles, width 16mm, manufactured from 0.3 mm aluminium.
- Flush join profiles with 3 x 7 mm ventilation holes, width 16 mm, manufactured from 0.3 mm aluminium. Perforated flush join profiles can be used in order to achieve a ventilating ceiling.

Panels to be manufactured from prepainted, stove enamelled aluminium, alloy EN-AW-5050 or equivalent (according to EN 1396 and ECCA). Panels have a length of \_\_\_\_\_ mm (manufacturer availability 1000-6000 mm and on request 250-1000 mm and > 6000 mm). Panels to be coupled in longitudinal direction by means of panel splices. Join profiles to be manufactured from prepainted, stove enamelled aluminium, alloy EN-AW-5050 or equivalent (according to EN 1396 and ECCA). Joints 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 standard module of 100 (non-standard carriers are available to achieve a module between 93 and 150 mm).

### PART 3. ADDITIONAL SPECIFICATIONS

#### 3.1 PERIMETER PROFILES

- Clip-on U profile 28.6 x 19 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 or aluminium
- Wall W-profile 45 x 21 x 21 x 18.5 mm made of 0.8 mm thick steel or aluminium

#### 3.2 PERFORATIONS

Manufacturer shall supply Luxalon® 84R panels with following perforation specifications:

- Ø 1.0 mm, Δ 2 mm with 23% open area
- Ø 2.0 mm, Δ 5 mm with 16% open area

Perforated panels to have a nominal plain border along the longitudinal panel direction to assure a maximum flatness and product stability:

- 84R panel, 1 mm perforated to have a plain border of 7 mm
- 84R panel, 2 mm perforated to have a plain border of 6 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® 84R panels code no. \_\_\_\_\_ or a special colour will made to match.

The coating will consist of a tough and durable polyester finish in nominal thickness of approximately 20 microns, applied in a continuous coilcoating 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 recommendations including specific additional requirements as may be called for in the specifications or shown on the drawings.

## LUXALON® CEILING SYSTEMS

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