# **FOCUS ON** Curved Ceiling

Soft undulating shapes, curves, dramatic bulkheads - all design possibilities with Luxalon<sup>®</sup> Curved Ceilings from Hunter Douglas. Explore your creativity and break boundaries - inside the curve.







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## 84R Curved

#### PANELS

The 84R ceiling system consists of round-edged panels (1) which can be easily clipped on a carrier (2). The panels can be joined with the panel splice or by clipping the panels over each other. Curved 84R ceilings can be created by using a flexible carrier or curving the panels (1).

#### SUSPENSION

The panel carrier (2) 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 the carrier splice (5). A nonius hanger (3) and fixing pieces (4) are provided for suspension.

#### **MAXIMUM SPANS**

\* Minus 200 mm in case of acoustic pads.

#### **DIMENSIONS & WEIGHTS**

\* Based on panels installed on 3 or more carriers.

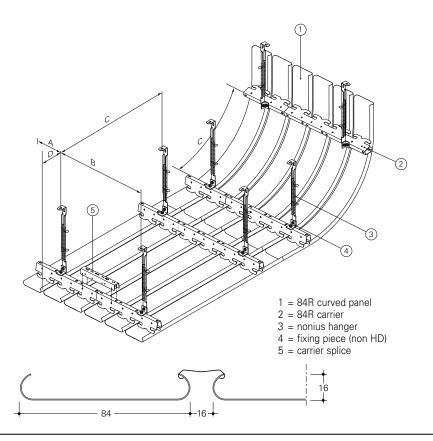
The panels are made to measure in any length from 800 mm up to 6000 mm. Panels > 6000 mm available on request.

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

The required number of components depend on individual project requirements. Figures are based on maximum spans.

#### FIXED AND VARIABLE

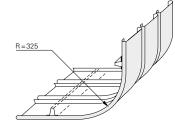
Curved panels help create concave, convex or undulating ceilings with a fixed radius of 325 mm, or a variable minimum radius of 1250 mm, achieving dramatic visual effects while also accommodating varying heights. Panel angles can vary between 0 degrees (flat panel) and 90 degrees.



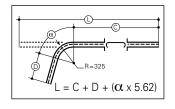
Panel type	Carrier S	pan (mm)		Panel Sp	an (mm)	
			on 2 c	arriers	on 3 or m	ore carriers
	Α	В	C*	D	C*	D
84R	300	1700	1500	150	1700	150

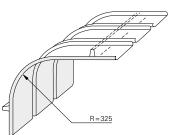
Panel	Width	Module	Min.	Max.	Max. Weight panels & carriers/m <sup>2*</sup>			
type	(mm)	(mm)	length	length	Steel carrier		Steel carrier Alu carri	
			(mm)	(mm)	Excl joins	Incl joins	Excl joins	Incl joins
84R	84	100	800	6000	1.8 kg	2.3 kg	1.7 kg	2.2 kg

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

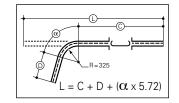


Outside corner (fixed radius)





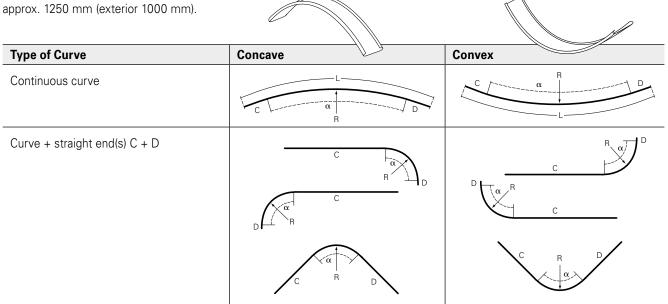
Inside corner (fixed radius)



### 84R Curved

#### AVAILABLE CURVED PANEL TYPES

Standard minimum radius for all curves approx. 1250 mm (exterior 1000 mm).



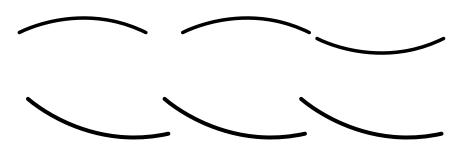
#### APPEARANCE

- A linear, open ceiling surface using a concealed carrier suspension system allows the chosen panel curve to determine the appearance of the ceiling.
- The easy panel-on-carrier suspension system, the same as in the standard 84R ceilings, allows for easy transition to straight ceilings using the same panel.
- Long and narrow panel ceilings, length made to measure up to 6000 mm, allow swift installation (especially in larger areas) and reduce the needs for joints to a minimum.
- \* Curved panels feature straight ends of min. 130 mm.

I: Multiple panel curved ceilings:



II: Single panel curved ceilings



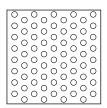
Legend	Min/Max Values
L = Length of straight panel	Lmin = 1 mtr (std)
	Lmax = 6 mtr (std)
C/D = Length of straight ends	C/Dmin = 130 mm
R = Radius	Rmin convex = 1250 mm
	Rmin concave = 1000 mm
$\alpha$ = Angle (alpha degrees)	$\alpha$ max = 90°

VALUES

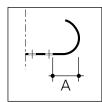
### Acoustics 84R Curved

#### **PERFORATION OPTIONS**

Panels can be supplied perforated with a Ø of 1.5 mm (open area of 23%). Perforations with a Ø of 1.0 and 2.0 mm are available on request. As a standard feature, perforated panels are supplied with a sound absorbing non-woven tissue glued into the panel for enhanced acoustical performance.

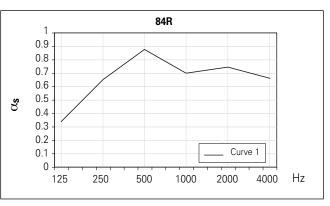


#### 84R



- Note: Panels have a plain border along their length to insure that the panel is flat and to enhance its strength.
- **Ø 1.5 mm:** A = 7 mm 84R

#### SOUND ABSORPTION DATA 84R (straight 84R panel)



 $\alpha_{\rm S}$  = sound absorption degree:

an absorption of 1.0 indicates a 100% absorption of sound.

#### - Curve 1 $\alpha_{\text{S}}$ 84R

84R panels, perforated with Ø1.5 mm holes, module 100 mm, closed joints. The reverse side of the panels is provided with black non- woven tissue glued over the whole perforated area. Plenum depth is 200 mm.

Freq. Hz.	125	250	500	1000	2000	4000	$\alpha_w$	NRC
Curve 1	0.34	0.65	0.88	0.70	0.74	0.66	0.75	0.75

## Curved Carrier

#### PRINCIPLE

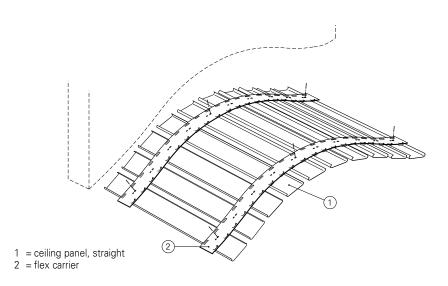
Consider a different and dramatic design - a curved ceiling with straight panels. This ceiling is possible when you use the MultiPanel system and the panel systems 84B, 84R and 70U.

#### BENEFITS

- A standard product and production process creates an extremely cost effective curved metal ceiling solution.
- Curved carriers support concave, convex or undulating ceilings, creating dramatic visual effects while accommodating varying heights.
- Long and narrow panel ceilings are made to measure up to 6000 mm, which allows for swift installation (especially in larger areas) and reduces the need for joints to a minimum.
- The same easy panel-on-carrier suspension system as used on standard ceilings, allowing easy transition to straight ceilings using the same panel.

#### PRINCIPLE FLEXIBLE CARRIERS

Luxalon<sup>®</sup> linear ceiling system 84B, 84R, 70U and MultiPanel



#### **MINIMUM RADIUS FLEXIBLE CARRIER**

Ĺ,	CO 			1	CON		
Panel type Open join Incl. join profiles			Panel type	Open join	Incl. joi	n profiles	
84R	230	-	230 (Flush join)	84R	230	-	230 (Flush join)
30B/BD	200	200 (V)	300 (U)	30B/BD	200	600 (V)	1200 (U)
80B	300	300 (V)	450 (U)	80B	450	600 (V)	600 (U)
130B	1200	1200 (V)	1200 (U)	130B	1200	1200 (V)	1200 (U)
180B	600	600 (V)	600 (U)	180B	600	600 (V)	600 (U)
84B	600	N.A.	N.A.	84B	N.A.	N.A.	N.A.
70U	600 incl. locking clip	600 excl.	locking clip	70U	200 incl. locking clip	1200 excl.	locking clip

## Material Specifications

#### DURABILITY

Luxalon<sup>®</sup> curved ceilings are manufactured from rollformed aluminium coil. Finished with a polyester paint, these ceilings are durable and low maintenance. The coating is stove enamelled in a continuous coil coating process ensuring uniform coating thickness and absolute adhesion.

#### **FIRE BEHAVIOUR**

Luxalon® metal suspended ceilings are classified according to EN 13501-1 as non-combustible 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 stability. More information is available on request.

#### **COLOUR RANGE**

The standard interior and exterior colour range includes several different colours and finishes. See colour chart on the website. Any other (RAL or NCS) colour is available on request.

#### TOLERANCES

As a member of the Technical Association of Industrial Metal Ceiling Manufacturers (TAIM), Hunter Douglas complies with tolerance criteria as specified in chapter 4 of the TAIM Quality standards for metal.

#### **EASY PLENUM ACCESS**

The panels can be easily demounted by hand allowing easy and full access to services and installation in the plenum.

#### CERTIFICATIONS

- Taim QS
- VOC emissions class A+
- Indoor Air Comfort Gold

For more information visit our website: www.hunterdouglasarchitectural.eu





SGS Produ Hunte Ceilin

Production by Hunter Douglas Ceiling Center

#### **EXTERIOR USE**



Exterior building applications cope with severe conditions like wind, rain, snow, dirt, vandalism and UV light. Our special aluminium alloy, highquality surface treatments featuring Luxacote<sup>®</sup> and our windproof systems ensure durability in applications like canopies, shopping centres and railway/ underground stations.

- Box-shape, bevel-edge and round-edge panels
- Special alloy of corrosion-resistant aluminium
- Luxacote<sup>®</sup> coating system resistant to UV and scratches and is rain-, dirtand snow-proof
- Certified for wind loads

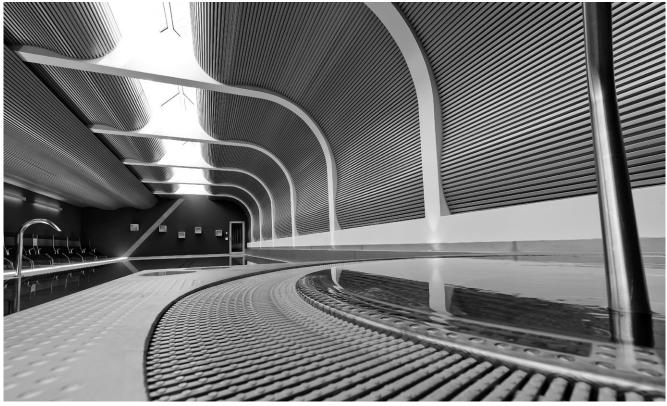
### **Impressions**

#### **CURVED PANELS**



Project: Berceni-Sudului Food Market | Location: Bucharest, Romania | Product: Curved ceiling 84R

**CURVED CARRIERS** 



Project: Hotel Ambassador | Location: Zermatt, Switzerland | Product: Linear 30BD Curved Carrier

### HunterDouglas Architectural

### Designed to work for you

Hunter Douglas is a global player within the field of modern architecture. We understand the conflict between form and function better than anyone, and enrich the market with inspiring solutions that strengthen the aesthetics of buildings and their functionality in terms of indoor climate, energy use and acoustics.



BAFFLES



STRETCH METAL



CELL 🔺



TILES & PLANKS

Our metal ceilings offer outstanding acoustics and unique design options, ranging from linear ceiling panels to baffle and cell ceilings.

### Architectural services

We support our business partners with a wide range of technical consulting and support services for architects and installers. We assist architects and developers with recommendations for materials, shapes, dimensions, colours and finishes.

We also help creating design proposals, visualisations and installation drawings. Our services to installers range from providing detailed installation drawings and instructions to training installers and advising on the building site.

Contact our **Project Support** for further help and advice on the design

More information

Call us: +31 (0)10 - 486 99 11

Send us an e-mail: info@hunterdouglasarchitectural.eu

Visit our website: www.hunterdouglasarchitectural.eu



Hunter Douglas adopts the cradle to cradle (C2C) product philosophy to the design of products that fit the circular paradigm. They are designed for longevity, using materially healthy technical nutrients that can be reused at end of life as a high-quality source for something new.

*Cradle to Cradle Certified®* is a registered trademark of the Cradle to Cradle Products Innovation Institute.



All steel products are 100% recyclable at the end of their lifecycle.



All aluminium products are 100% recyclable at the end of their lifecycle.

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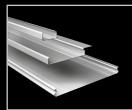
#### ASIA AUSTRALIA | LATIN AMERICA | NORTH AMERICA

Austria Belgium Bulgaria Croatia / Slovenia Czech Republic Denmark France

Finland Germany Greece Hungary Israel Italy The Netherlands Norway Poland Portugal Romania Serbia Slovakia Spain

Sweden Switzerland Turkey United Kingdom South Africa Middle East

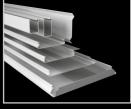
LINEAR

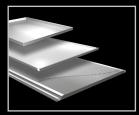




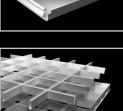


EXTERIOR





TILES | PLANKS | XLnt



CELL



STRETCH METAL



**METAL BAFFLES** 

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