RAM METAL INDUSTRIES, L.L.C.

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MASTER CATALOG





RLD'S SPACES

Our vision is to advance the design and technology of architectural solutions for our clients and the world. We aim to stay at the leading edge of our industry by introducing sustainable solutions that bring light and beauty to the spaces we create.



OUR STORY

In 1957, Samir Rayes founded a ceiling manufacturing company in Kuwait based on exceptional quality and morally ethical business practices. His vision and dream expanded to Beirut in 1967, adding to their portfolio the production of metal ceilings. Samir broadened the work of the facility in Kuwait to include industrial extrusion in 1977, manufacturing high-quality ceiling and partition solutions while maintaining a commitment to quality and integrity.

After graduating from George Washington University in Washington, D.C., in 1989, Samir's son Ghaith El Rayes continued his father's legacy by establishing RAM in Dubai, expanding the company from linear profiles into custom solutions to provide a superior experience that elevates light and beauty.

As the market demand for custom ceiling solutions grew, Ghaith ventured into yet a larger manufacturing facility in the Dubai Industrial City in 2010, establishing RAM as the largest ceiling manufacturing company in the Middle East and one of the leading ceiling companies worldwide. To ensure RAM maintain the highest international standards of quality while serving megaprojects, a logistics facility was inaugurated in 2017.

Today, RAM is based in Dubai and is a global leader in design and manufacturing, harnessing our natural resources to create exceptional architectural solutions. As a family business, we value relationships and honesty, working as full partners with our clients to bring their vision to life.



1989

Ghaith El Rayes joins the company

2009

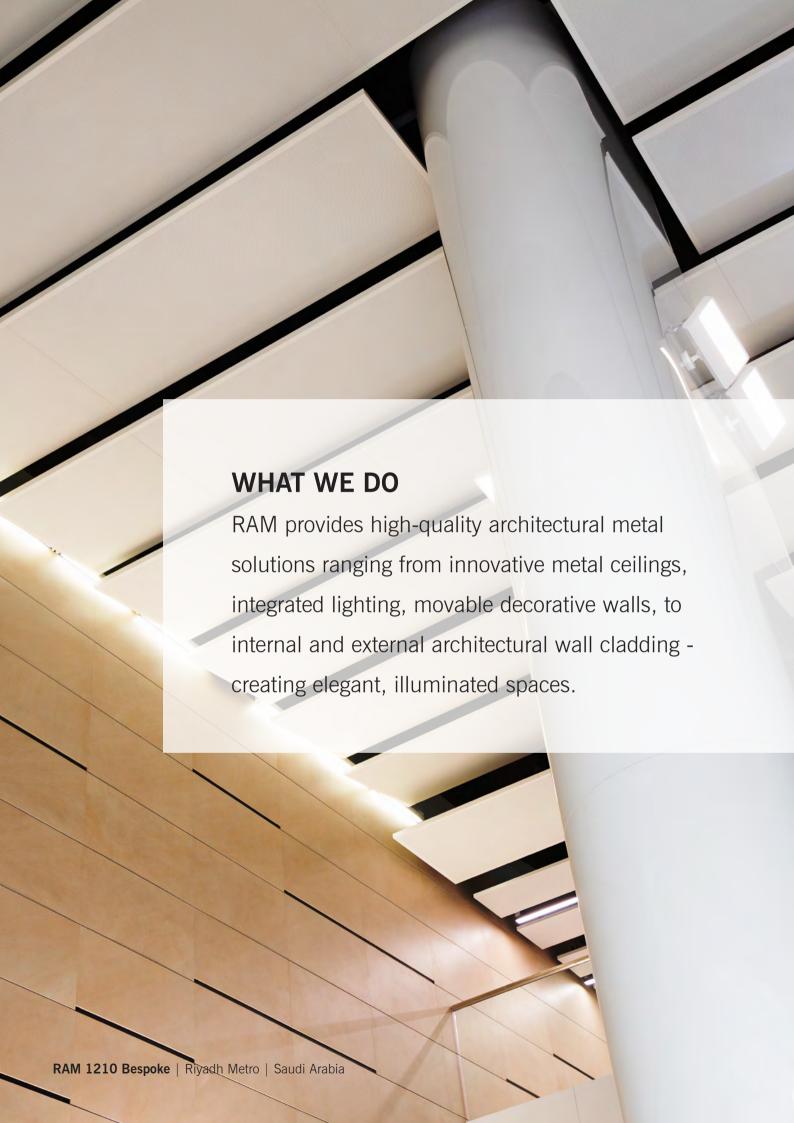
Expansion to larger manufacturing facility in Dubai

2017+

Logistics facility inaugurated in Dubai

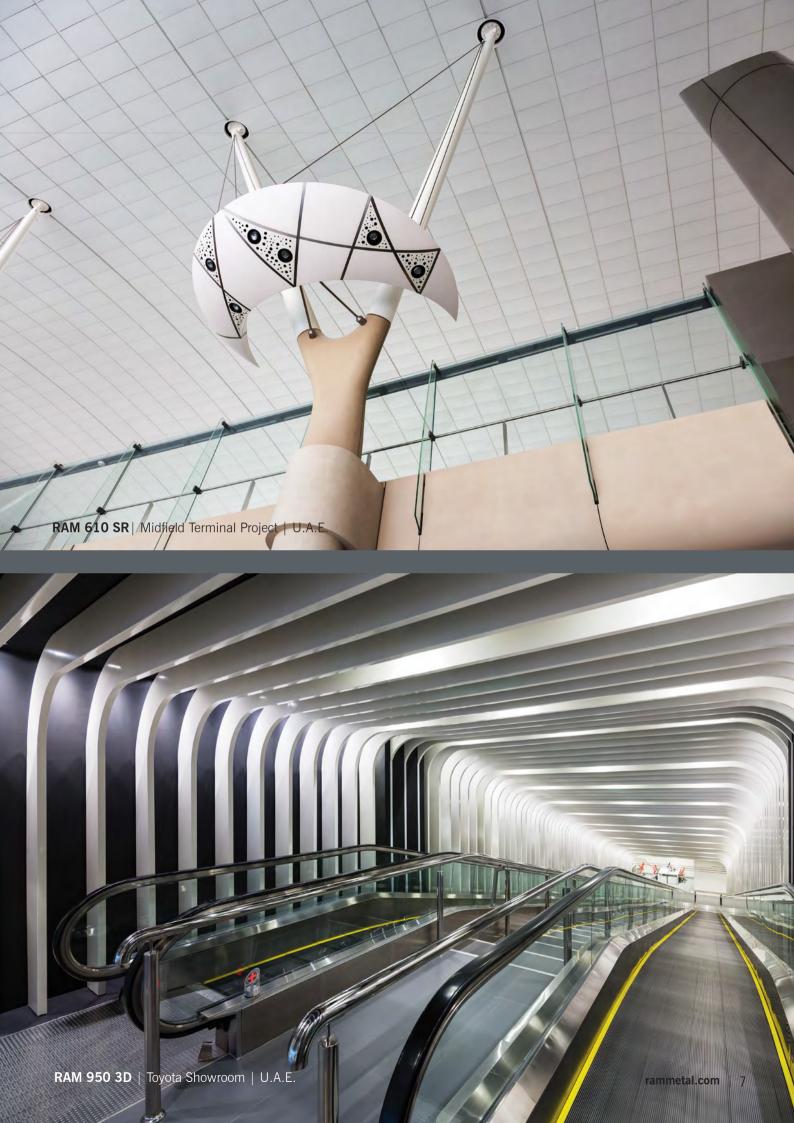
Dubai branch established Custom ceiling solutions added RAM established as largest ceiling manufacturer in the Middle East

RAM a global leader in the manufacture of architectural metal solutions

















OUR PROCESS

We deliver high-quality products for our clients, working with architects to create solutions that are environmentally sound, architecturally innovative, and inspirational.

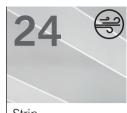
GUIDED BY DRIVEN BY



CEILING SYSTEMS



Strip



RAM 121-122

Strip **RAM 131**







Clip-in RAM 211-212

Lay-in/Lay-on RAM 221-223

Hook-on **RAM 231**

Snap-on **RAM 241**

300 SERIES OPEN GRID





Open Cell Continuous RAM 311-314

Open Cell Lay-on RAM 321-323

Open Cell Torsion **RAM 331**

400 SERIES CORRIDOR SOLUTIONS









Self Supported Hook-on

RAM 411

Self Supported Lay-in **RAM 421**

Self Supported Clip-in **RAM 431**

Self Supported Slide RAM 441-443

500 SERIES BEAM GRID







RAM 511-512

Threaded/Flat RAM 521-522

Hook-on **RAM 531**

500 SERIES TORSION





RAM 621-622

RAM 611

700 SERIES FIRE RATED



F90 **RAM 711**



F120 **RAM 721**



High Guard RAM 811-812





RAM 911-912



Baffle RAM 921-922



Tubular RAM 931-932



Diaspace **RAM 941**



3D **RAM 951**





Wings **RAM 1011**



Waves **RAM 1021**

MESH 1100 SERIES



Mesh RAM 1111-1114

1200 SERIES BESPOKE



Bespoke **RAM 1211**

WALL SYSTEMS

2000 SERIES DEMOUNTABLE INTERNAL MAL METAL CLADDING

Internal Wall Covering

Internal Column Covering

RAM 2011-2014

RAM 2021-2024

EXTERNAL METAL CLADDING 2100 SERIES



External Wall Covering

External Column Covering

RAM 2111-2114

RAM 2121-2124





Bespoke Wall Cladding **RAM 2211**

SHADE CONTROL

3000 SERIES SHADE CONTROL



Shade Control **RAM 3011**

ARCHITECTURAL ELEMENTS

5000 SERIES METAL BULKHEAD

128
Metal Rulkhead

Metal Bulkhead RAM 5011-5012

5100 SERIES METAL COVE LIGHT



5200 SERIES METAL SKIRTING



Metal Skirting RAM 5211

SURFACE DESIGN PATTERNS

6000 SERIES
SURFACE DESIGN
PATTERNS



Perforation Patterns **6010**



Expanded Metal Mesh Patterns **6020**

TECHNICAL INFO

144 COLORS/FINISHES

150 DATA/PERFORMANCE









A strip ceiling system designed for internal and external application, with flush filler (rounded edge). Acoustics performance for internal system. Easy accessibility to ceiling void with access key tool. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum: 0.5mm to 2.00mm. Galvanized Steel: 0.45mm to 1.00mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZES

MODULE WIDTHS (mm): 100/150/200/300 **STRIP WIDTHS** (mm): 85/135/185/285

FILLER STRIP WIDTH: 15mm PANEL DEPTH: 15mm EDGE DETAIL: RAM 111: Rounded

+ Custom sizes are available upon request

COATING

Polyester Coating: $(5\mu \text{ (Back)} + 20\mu \text{ (Face)})$ Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

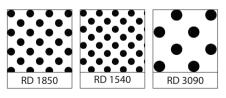


SPECIAL FINISHES



+ See page 144 for additional colors & special finishes available

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



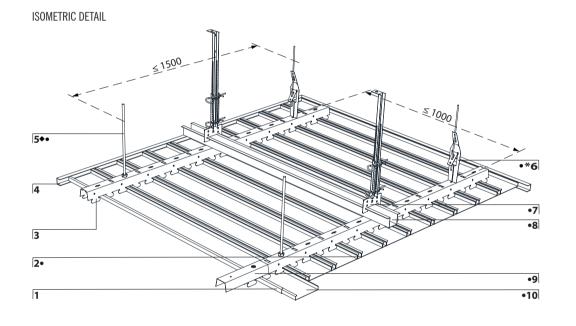
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 111 STRIP WITH FLUSH FILLER



COMPONENTS

- 1 Strip
- 2 Filler Strip ●
- 3 Main Carrier
- 4 Wall Trim
- 5 Threaded Rod
- 6 Adjustment Clip *●
- Rigid Hanging System •
- 8 Stabilizer •
- 9 C Splice ●
- **10** S Splice •
- 11 Wedge •
- ◆ For external application * For internal application

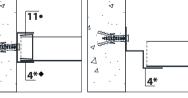
Custom sizes can be offered

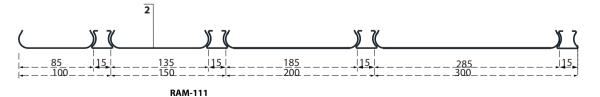
PANEL FILLER STRIP CONFIGURATION



PANEL STRIP MODULE

PERIMETER OPTIONS 11•







A strip ceiling system designed for internal and external application, with closed groove & butt joint. Acoustics performance for internal system. Easy accessibility by sliding the strip out of the carrier. Progressive access to ceiling void. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum: 0.45mm to 0.8mm. Galvanized Steel: 0.45mm to 0.7mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZES

STRIP WIDTHS (mm):

RAM 121: 100/150/200/300 RAM 122: 200/300

PANEL DEPTH: 15mm

EDGE DETAIL:

RAM 121: Closed Groove (20mm) RAM 122: Square Butt Joint

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

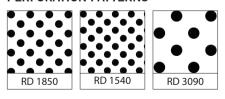


SPECIAL FINISHES



+ See page 144 for additional colors & special finishes available

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000. which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



WIND RESISTANCE

Tested as per ASTM E330-02.



FIRE PERFORMANCE

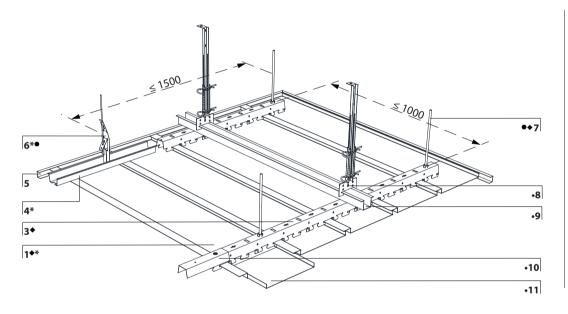
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 121 STRIP WITH CLOSED GROOVE RAM 122 STRIP WITH BUTT JOINT

ISOMETRIC DETAIL

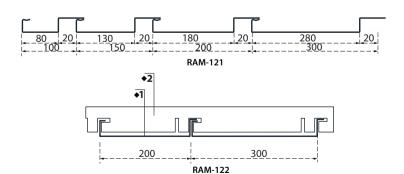


COMPONENTS

- 1 Strip **
- 2 RAM-122 Main Carrier ◆
- 3 RAM-121 Main Carrier ◆
- 4 RAM-121 Main Carrier *
- 5 Wall Trim
- 6 Adjustment Clip *●
- 7 Threaded Rod ••
- 8 Rigid Hanging System•
- 9 Stabilizer •
- 10 S Splice •
- 11 C Splice 12 Wedge •
- ◆ For external application For internal application
- Optional

Custom sizes can be offered

PANEL STRIP MODULES

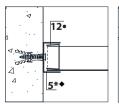


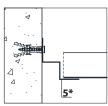
JOINT DETAIL





PERIMETER OPTIONS





CEILING SYSTEMS LINEAR 130 series STRIP



A strip ceiling system for internal and external application, with V Joint. Acoustics performance for internal system. Accessibility to ceiling void with access key tool for internal application and progressive access for external application. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIALS

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

0.7mm to 0.8mm.

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZES

STRIP WIDTH (mm): 200/300/400

PANEL DEPTH: 33mm EDGE DETAIL: Closed V

+ Custom sizes are available upon request

HIGH WIND RESISTANCE

Up to 215km/hr

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

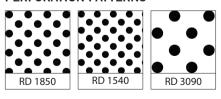


SPECIAL FINISHES



+ See page 144 for additional colors & special finishes available

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



WIND RESISTANCE

Tested as per ASTM E330-02.



FIRE PERFORMANCE

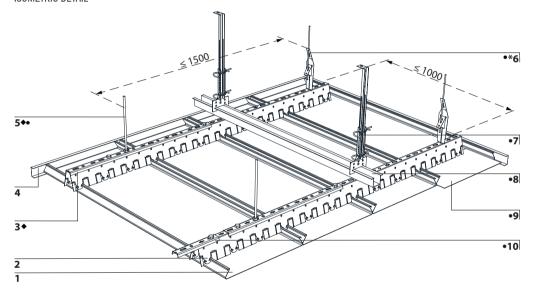
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 131 STRIP WITH V JOINT

ISOMETRIC DETAIL

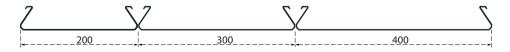


COMPONENTS

- 1 Strip
- 2 Main Carrier
- 3 Reinforcement Angle ◆
- 4 Wall Trim
- 5 Threaded Rod ◆●
- 6 Adjustment Clip *●
- 7 Rigid Hanging System •
- 8 Stabilizer •
- 9 S Splice •
- 10 C Splice •
- 11 Bolt & Nut *
- 12 Wedge •
- ◆ For external application * For internal application
- Optional

Custom sizes can be offered

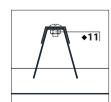
PANEL STRIP MODULE



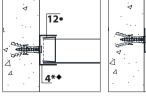
JOINT DETAIL

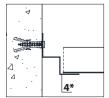


REINFORCEMENT DETAIL

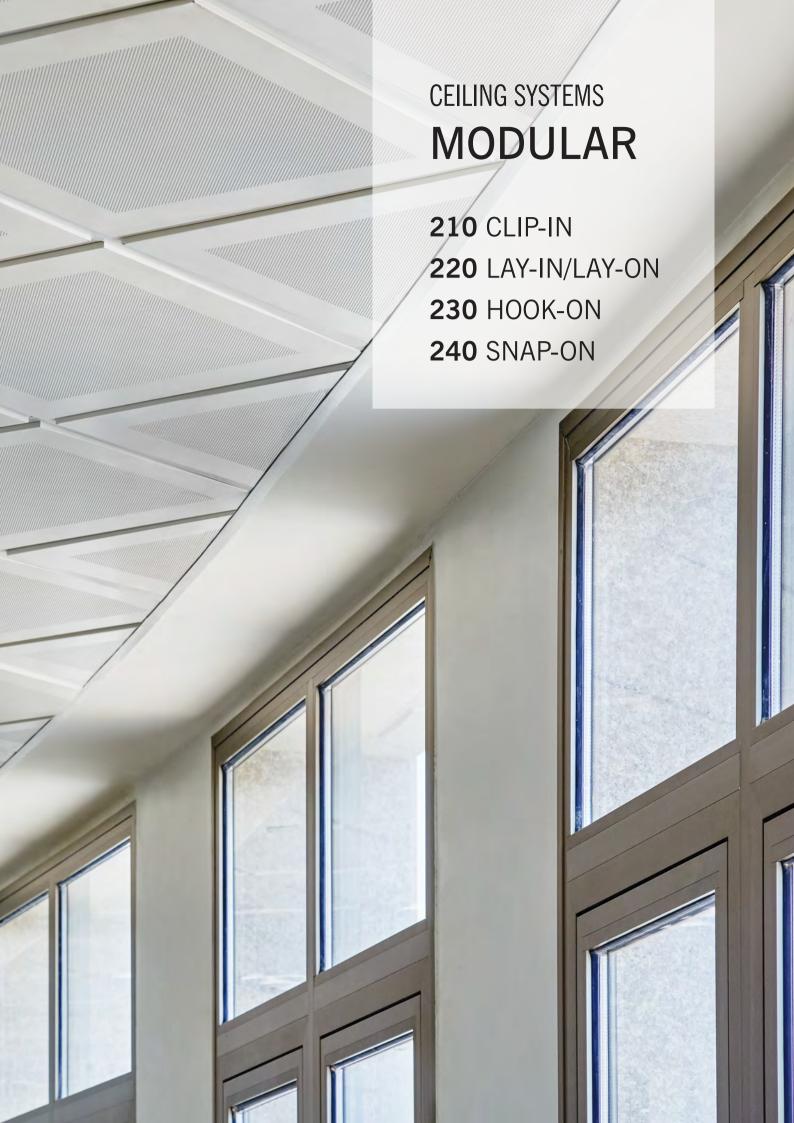


PERIMETER OPTIONS









CEILING SYSTEMS MODULAR 210 series

CLIP-IN

Clip-In type ceiling designed for internal application. Clipped in to a concealed suspension system. Fully demountable with downward accessibility / hinge down accessibility using panel removal access key tool. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum: 0.5mm to 0.8mm. Galvanized Steel: 0.45mm to 0.7mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

COATING

Polyester Coating: $(5\mu \text{ (Back)} + 20\mu \text{ (Face)})$ Polyester Powder Coating: $(70\mu - 80\mu)$

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

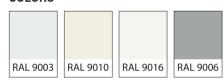
Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

SIZES (mm)

	Panel Joint Details			RAM 211	RAM 212
	Square	5 mm Beveled	3mm Beveled		
300 X 300	•	•		•	
300 X 600	•	•		•	
300 X 1200	•	•		•	
600 X 600	•	•	•	•	•
600 X 1200	•	•		•	•
600 X 1800	•			•	•
1200 X 1200	•			•	•

^{*}RAM 211 -With tool key access

COLORS

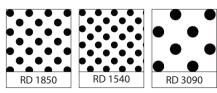


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS



^{*}RAM 212 -With hinge down access

⁺ Custom Sizes available upon request



ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR – 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

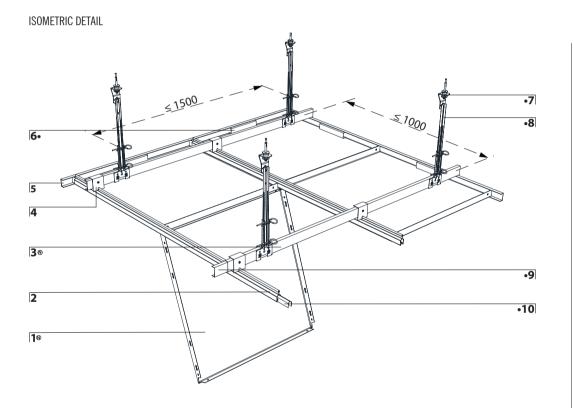
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 211 CLIP-IN

RAM 212 CLIP-IN/HINGEDOWN



COMPONENTS

- 1 Panel ®®
- 2 Narrow Carrier
- 3 Stabilizer
- 4 NC Bracket®
- 5 Wall Trim
- 6 Wedge •
- 7 Anti-Vibration Clip (RH) •
- 8 Rigid Hanging System •
- 9 ST Splice
- 10 C Splice •
- 11 Spring Tee Carrier
- 12 SC Bracket®
- 13 Wire Clip®
- 14 U Bracket •
- 15 Threaded Rod •
- 16 Anti-Vibration Clip (TR) •
- 17 Adjustment Clip •
- 18 Coupling Clip •
- **19** Security Wire ●®

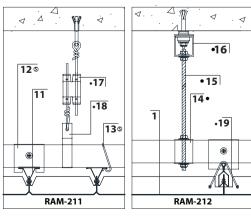


Luminous Panel •

- Optional
- **®** For Narrow Carrier
- **©** For Spring Tee Carrier

Custom sizes can be offered

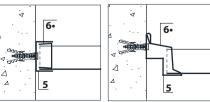
OPTIONAL HANGING SOLUTIONS



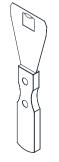
JOINT DETAIL

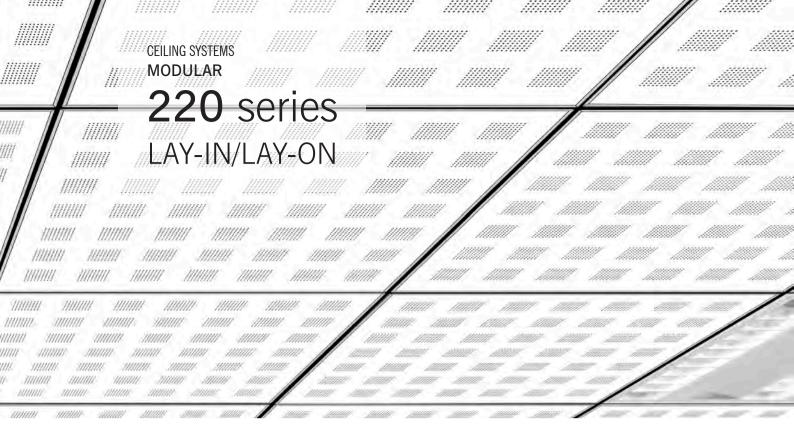


PERIMETER OPTIONS



ACCESS TOOL •





Lay-In type T-Grid ceiling designed for internal application. Modular ceiling laid-in/on to a T-Grid (15mm/24mm) with exposed suspension system & revealed / non revealed / flush panel edges. Lift upwards out from grid to gain ceiling void access. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum: 0.5mm to 1.0mm

Galvanized Steel: 0.5mm to 0.8mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated Decorative Patterns

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation

COLORS

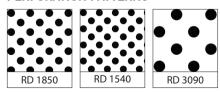


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS



+ See page 136 for all other pattern options

SIZES (mm)

Panel width	RAM 221	RAM 222	RAM 223	
300 X 600	•		•	
300 X 1200	•		•	
600 X 600	•	•	•	
600 X 1200	•		•	
600 X 1800	•		•	
1200 X 1200	•		•	

+ Custom Sizes available upon request



ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece – NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation – NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to – 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85 - 0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 221 LAY-IN RAM 222 GT15 RAM 223 LAY-ON

ISOMETRIC DETAIL S 1500 4 1 6

COMPONENTS

- 1 Panel
- 2 Main Carrier
- 3 Wall Trim
- 4 Primary Cross Tee 1200
- **5** Secondary Cross Tee 600
- 6 Adjustment Clip •
- 7 DS Bracket •
- 8 Threaded Rod •
- 9 Anti-Vibration Clip (TR) •
- 10 Wedge●



🗽 Luminous Panel •

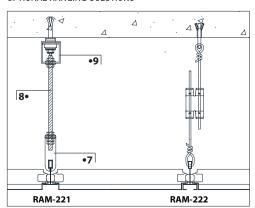
Ontional

Custom sizes can be offered

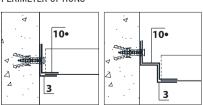
PANEL-CARRIER JOINT DETAILS

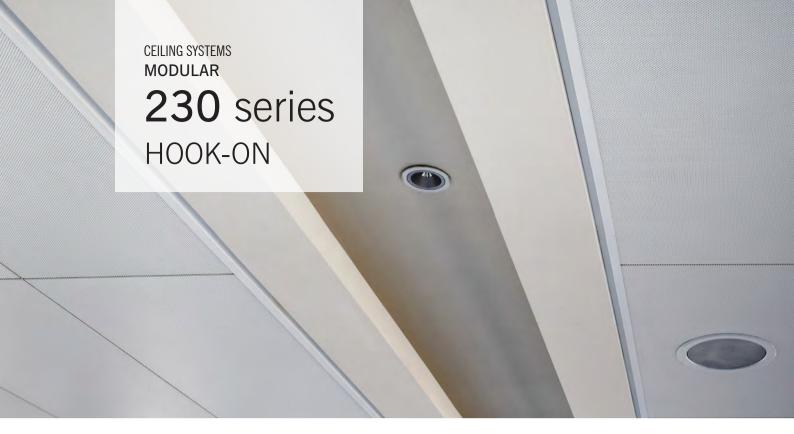


OPTIONAL HANGING SOLUTIONS



PERIMETER OPTIONS





Hook type ceiling designed for internal or external application. Modular ceiling panel laid on concealed 'J' profile. Lift upwards out and drop down to gain ceiling void access. Offered in wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum: 0.6mm to 3.0mm. Galvanized Steel: 0.5mm to 2.0mm.

+ Custom thickness are available upon request

SURFACE FINISH

Perforated Decorative Patterns

SIZES

SINGLE OR DOUBLE SKIN PANELS (mm) WIDTH: 200 to 1000 LENGTH: 500 to 3000

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70µ -80µ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

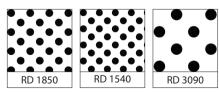


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

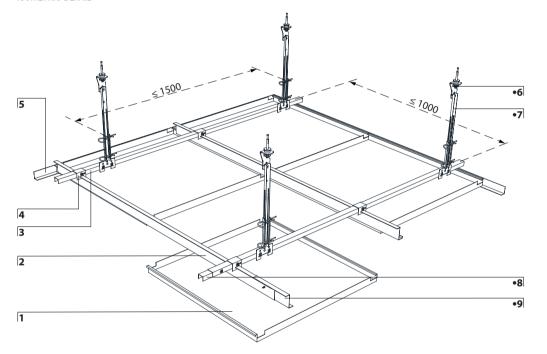
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 231 HOOK-ON

ISOMETRIC DETAIL



COMPONENTS

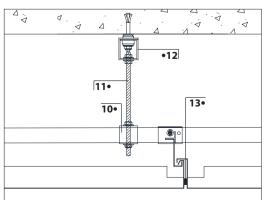
- 1 Panel
- 2 Z Carrier
- 3 Stabilizer
- 4 ZC Bracket
- 5 Wall Trim
- 6 Anti-Vibration Clip (RH) ●
- 7 Rigid Hanging System •
- 8 ST Splice •
- 9 C Splice •
- 10 U Bracket •
- 11 Threaded Rod •
- 12 Anti-Vibration Clip (TR) 13 Self-Adhesive Seal •
- 14 Wedge •



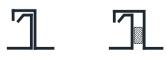
Optional

Custom sizes can be offered

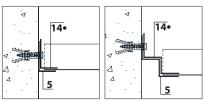
HANGING SOLUTION



JOINT DETAIL



PERIMETER OPTIONS





Snap-On type ceiling for internal application. Snap-On can lock the panel in to a T Grid suspension system. Fully demountable with downward accessibility by pushing the snap lock within the panel using a key tool. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum: 0.5mm to 0.7mm. Galvanized Steel: 0.45mm to 0.6mm.

+ Custom thickness are available upon request

SURFACE FINISH

Perforated Decorative Patterns

SIZES (mm)

Panel width	RAM 241	
300 x 600	•	
300 x1 200	•	
300 x 600	•	
600 x 1200	•	
600 x 1800	•	
1200 x 1200	•	

+ Custom Sizes available upon request

COATING

Polyester Coating: $((5\mu \text{ (Back)} + 20\mu \text{ (Face)})$ Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

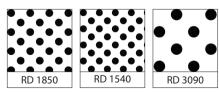


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



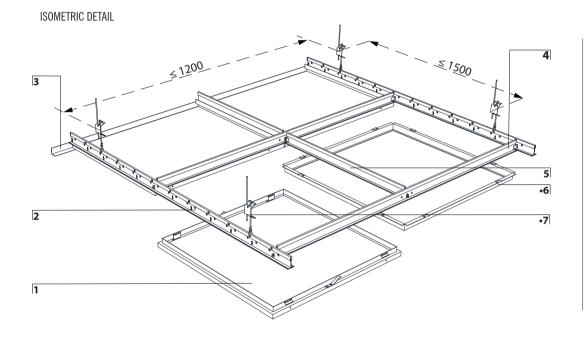
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 241 SNAP-ON



COMPONENTS

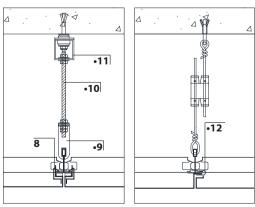
- 1 Panel
- 2 Main Carrier
- 3 Wall Trim
- 4 Primary Cross Tee 1200
- **5** Secondary Cross Tee 600
- 6 Light Tray •
- 7 Adjustment Clip •
- 8 Snap-in Clip
- 9 Direction Suspension Bracket •
- 10 Threaded Rod •
- 11 Anti-Vibration Clip (TR) •
- 12 Light Tray Clip •
- 13 Wedge



(Luminous Panel •

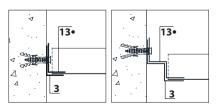
Custom sizes can be offered

OPTIONAL HANGING SOLUTIONS



PANEL-CARRIER JOINT DETAILS











An open cell continuous type ceiling, manufactured of roll formed Aluminum U profile 10mm/20mm/12mm wide. Panels are built with upper and lower blades that dismantle to lend easy access to ceiling void. Offered in a versatile range of patterns. Special boxes can be provided for MEP Services.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

THICKNESS

Aluminum: 0.4mm to 0.8mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

COATING

Polyester Coating: $((5\mu \text{ (Back)} + 20\mu \text{ (Face)})$ Polyester Powder Coating: (70µ -80µ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

SIZES (mm)

	Cell size	Blade width	Blade height
RAM 311	50/60/75/86/100/120/150/200/300	10	40/50/55
RAM 312	75/86/100/120/150/200/300	20	50
RAM 313	75/86/100/120/150/200/300	12	42
RAM 314	50/60/75/86/100/120/150/200/300	10/20	40/50/55

+ Custom Sizes available upon request

COLORS

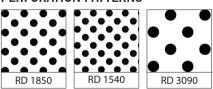
RAL 9003	RAL 9010	RAL 9016	RAL 9006

SPECIAL FINISHES



+ See page 144 for additional colors & special finishes available

PERFORATION PATTERNS





ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM

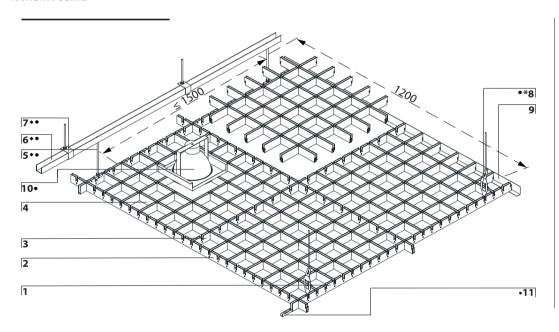
RAM 311 SQUARE/RECTANGULAR (10MM WIDTH)

RAM 312 SQUARE/RECTANGULAR (20MM WIDTH)

RAM 313 PYRAMID (12MM WIDTH)

RAM 314 MIX

ISOMETRIC DETAIL

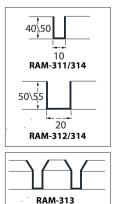


COMPONENTS

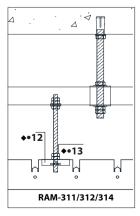
- 1 Main Carrier
- 2 Cross Bar 120
- 3 Cross Bar 60
- 4 Lower & Upper Blade
- 5 Threaded Rod ◆●
- 6 U Stabilizer ◆●
- **7** ST Bracket ◆●
- 8 Adjustment Clip *●
- 9 Wall Trim
- 10 Light Box •
- 11 C Splice •
- 12 MC Bracket ••
- 13 MC Bracket Nut **
- ◆ For external application * For internal application

Custom sizes can be offered

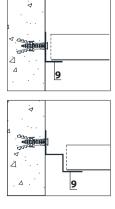
PANEL DESIGN PATTERN



OPTIONAL HANGING SOLUTIONS



PERIMETER OPTIONS



CELL OPTIONS









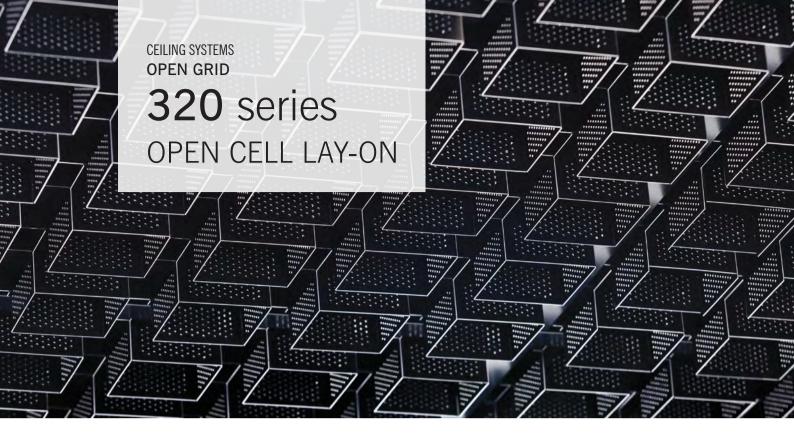


RAM-314/4

RAM-314/5

RAM-314/6

rammetal.com | 39



An open cell ceiling system, manufactured of roll formed Aluminum U profile 24mm/15mm wide, made of upper & lower blades to form a 600x600mm modular panels. Fixed on (24mm or 15mm) T-Grid suspension system, in order to allow easy access to ceiling void. Offered in a versatile range of patterns. Special boxes can be provided for MEP Services.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

THICKNESS

0.45mm to 0.7mm.

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

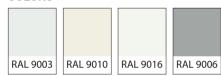
Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

SIZES (mm)

	Cell size	Blade width	Blade height
RAM 321	75/100/120/150/200/300	24	33/50
RAM 322	75/100/120/150/200/300	15	37
RAM 323	100 (65 x 35)	0.70	50

+ Custom Sizes available upon request

COLORS

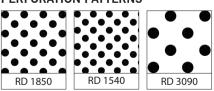


SPECIAL FINISHES



+ See page 144 for additional colors & special finishes available

PERFORATION PATTERNS





ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)



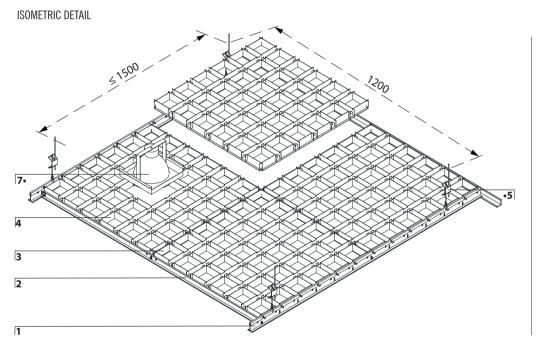
LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.

RAM 321 SQUARE/RECTANGULAR (24MM WIDTH)

RAM 322 SQUARE/RECTANGULAR (15MM WIDTH)

RAM 323 CUBE

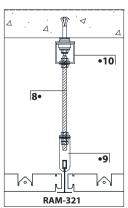


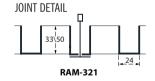
COMPONENTS

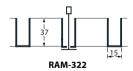
- 1 RAM 321/322/323 Main Carrier
- 2 Primary Cross Tee 1200
- 3 Secondary Cross Tee 600
- 4 RAM 321/322/323 Lower & Upper Blade
- 5 Adjustment Clip •
- 6 Wall Trim
- 7 Light Box ●
- 8 Threaded Rod •
- 9 Direct Hanging Bracket •
- 10 Anti-Vibration Clip (TR) •
- Optional

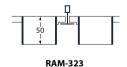
Custom sizes can be offered

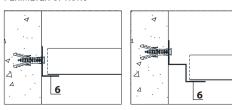
OPTIONAL HANGING SOLUTIONS

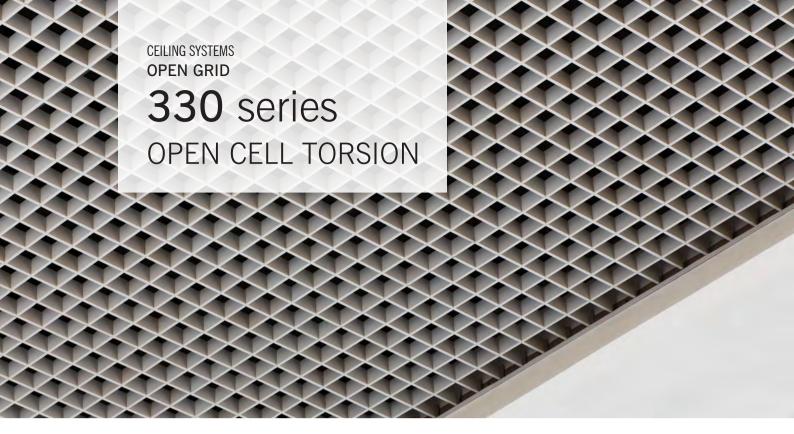












An open cell for high ceiling types. Ideal for exhibition centers, airports, car showrooms, & commercial establishments. Offered in a versatile range of patterns. Special boxes can be provided for MEP Services.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

THICKNESS

1.0 mm.

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

COATING

Polyester Coating: $((5\mu \text{ (Back)} + 20\mu \text{ (Face)})$ Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation

SIZES (mm)

	Cell size	Blade width	Blade height
RAM 331	40/75/100/120/150/200/300	0.70-1.00	40-200

+ Custom Sizes available upon request

COLORS

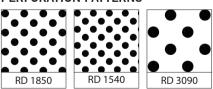


SPECIAL FINISHES



+ See page 144 for additional colors & special finishes available

PERFORATION PATTERNS





ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

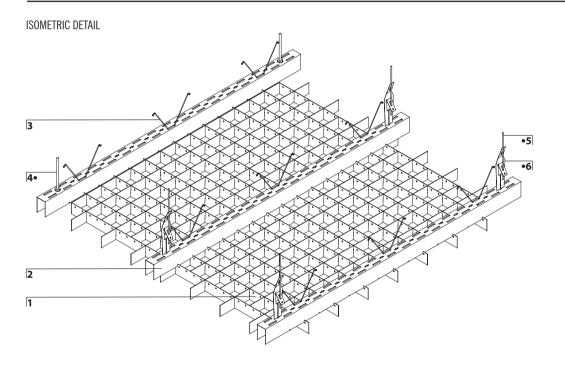
Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.

RAM 331 SQUARE/RECTANGULAR DIACELL

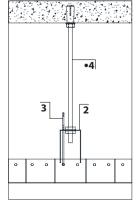


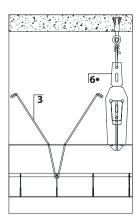
COMPONENTS

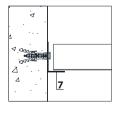
- 1 Upper & Lower Blade
- 2 Carrier
- 3 Torsion Spring Wire
- 4 Threaded Rod •
- **5** Wire Hanger ●
- 6 Adjustment Clip •
- **7** Wall Trim
- Optional

Custom sizes can be offered

SECTION DETAIL









CELL OPTIONS











A hook-on type self-supported ceiling for corridor solutions. Modular ceiling panels are laid on concealed 'J' profile. Can be removed from the ceiling and easily restored. Stays hinged to one side of the corridor for damage protection. Easy accessibility to ceiling void without any intermediate support. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel: 0.5mm to 1.0mm.

+ Custom thickness are available upon request

SURFACE FINISH

Plain

Perforated
Decorative Patterns

SIZE (mm)

WIDTH 300 to 700 LENGTH

900 to 3000

EDGE

Square

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

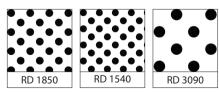


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece – NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation – NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to – 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



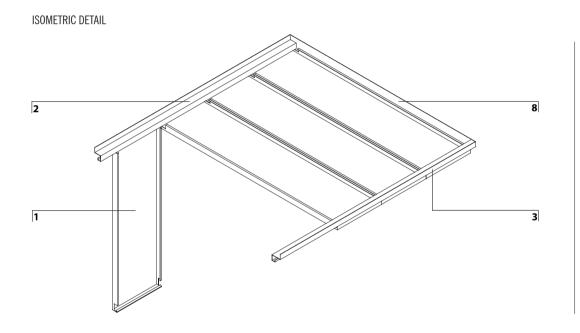
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 411 HOOK-ON



COMPONENTS

- 1 Panel
- 2 JU Profile (Fix)
- 3 JV Profile (Fix)
- 4 Z Profile Support Bracket
- 5 Bolt & Nut
- **6** JU Profile (Adjustable)
- **7** JV Profile (Adjustable)
- 8 Shadow Cover Profile
- 9 U Channel Profile

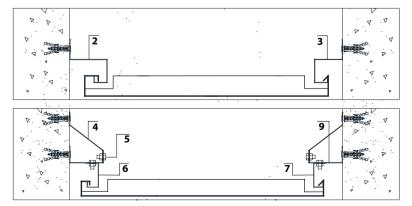


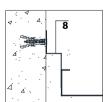
Luminous Panel •

Optional

Custom sizes can be offered

CARRIER DETAILS





PANEL JOINTS DETAIL





A lay-in type self-supported ceiling for corridor solutions. No suspension is required other than the "L" or "W" trim at the walls. An ideal solution for congested areas with ducts & other MEP services, in areas of limited ceiling drop. Fully demountable with easy accessibility to ceiling void without any intermediate support. Panels overlap at the long side. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel: 0.5mm to 0.8mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated Decorative Patterns

SIZE (mm)

WIDTH
200 to 700
LENGTH
900 to 3000
EDGE
Square

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

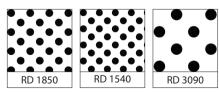


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece – NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation – NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to – 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



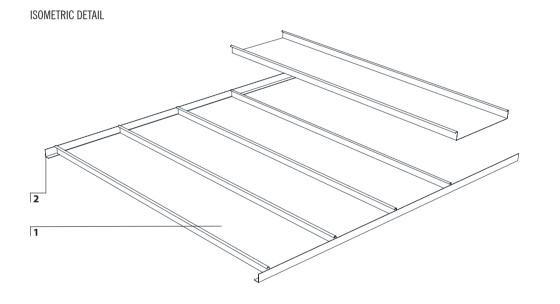
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 421 LAY-IN



COMPONENTS

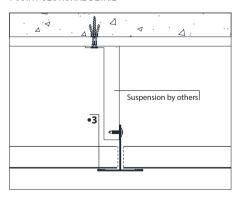
- 1 Panel
- 2 Wall Trim
- **3** T-Joint Profile ●



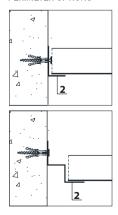
Optional

Custom sizes can be offered

T-JOINT SECTIONAL DETAIL



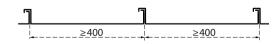
PERIMETER OPTIONS



JOINT DETAIL



PANEL STRIP MODULES





A clip-in type self-supported ceiling for corridor solutions. Modular ceiling panels clipped into concealed 'Z' profile. Fully demountable with downward accessibility using panel removal access key tool. Easy accessibility to ceiling void without any intermediate support. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel: 0.5mm to 0.8mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated Decorative Patterns

SIZE (mm)

WIDTH
300 to 700
LENGTH
900 to 3000
EDGE
Square

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

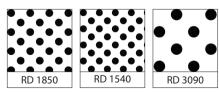


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

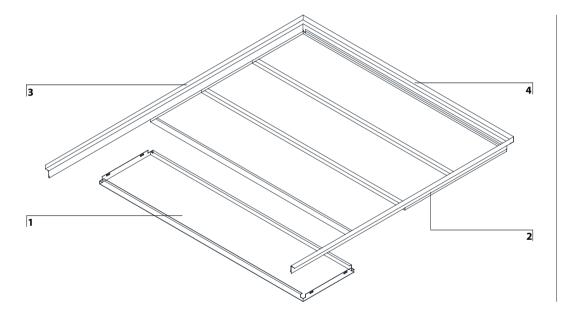
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 431 CLIP-IN

ISOMETRIC DETAIL



COMPONENTS

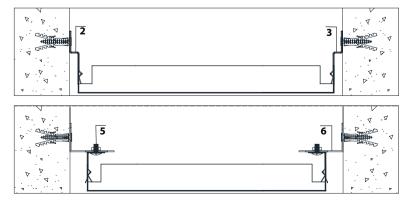
- 1 Panel
- 2 ZL Profile (Adjustable)
- 3 ZL Profile (Adjustable)
- 4 Shadow Cover Profile
- 5 Bolt & Nut
- 6 L Profile



Optional

Custom sizes can be offered

CARRIER DETAILS



PERIMETER OPTIONS



PANEL JOINTS DETAIL





A hinge down type self-supported ceiling for corridor solutions. Modular panel system with easy accessibility to ceiling void without any intermediate support. Panels can slide to any convenient position. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel: 0.5mm to 0.8mm.

+ Custom thickness are available upon request

SURFACE FINISH

Plain

Perforated

Decorative Patterns

SIZE (mm)

WIDTH

300 to 700

LENGTH

900 to 3000

EDGE

Square

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation

COLORS

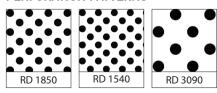


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



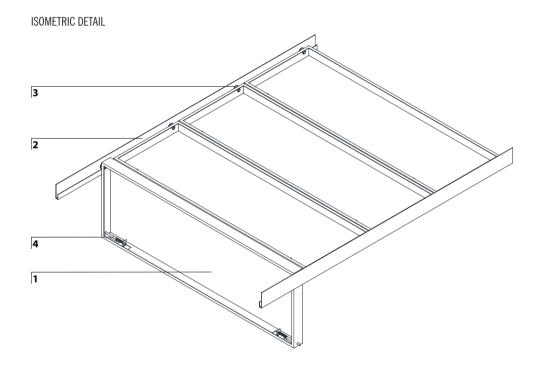
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 441 RAIL-SLIDE



COMPONENTS

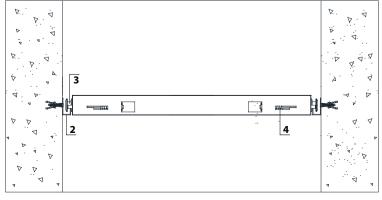
- 1 Panel
- 2 L Profile
- **3** Sliding Wheels
- 4 Locking Latches

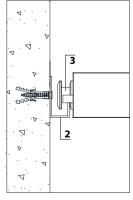


Optional

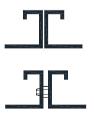
Custom sizes can be offered

SECTION DETAIL





PANEL JOINTS DETAIL



RAM 442 STEP-SLIDE

ISOMETRIC DETAIL 3

COMPONENTS

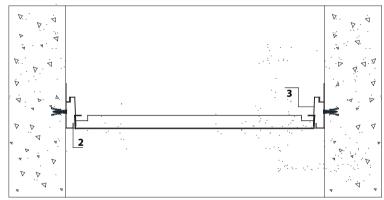
- 1 Panel
- 2 Step Hook Profile
- 3 Hook Profile
- 4 Blind Rivet

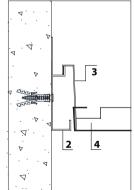


Optional

Custom sizes can be offered

SECTION DETAIL



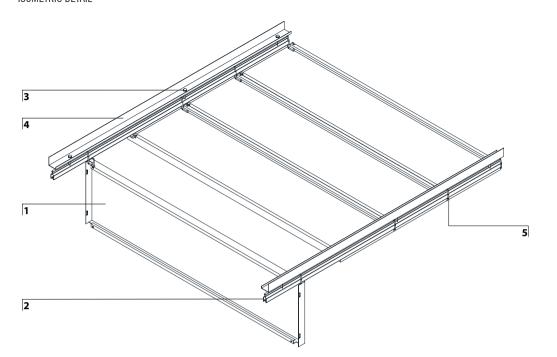


PANEL JOINTS DETAIL



RAM 443 HOOK-SLIDE

ISOMETRIC DETAIL



COMPONENTS

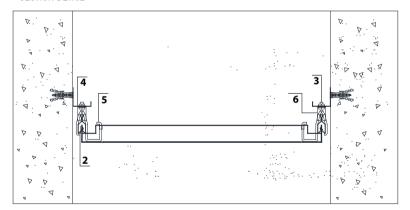
- 1 Panel
- 2 Narrow Main Carrier
- 3 Bolt & Nut
- 4 L Profile
- 5 Hinge Clip6 Carrier Bracket

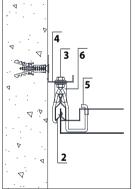


Optional

Custom sizes can be offered

SECTION DETAIL





PANEL JOINTS DETAIL









This continuous beam profile ceiling is an ideal solution for integrating ceiling with demountable partition. Available with sound attenuation panels. Can be manufactured in single & double skin. The beam profile can be used to integrate light fittings, AC grills, and other MEP services. Offered as recess, flush, or reveled edge with the panel. Panels are laid on/clipped in the beam profile, which can be produced in multiple sizes in order to avoid cutting the panels. Lifts upwards for access to ceiling void. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

PANELS (mm)
Aluminum or Galvanized Steel:
0.5 to 1.0

BEAMS (mm)
Galvanized Steel:
0.5 to 2.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated Decorative Patterns

SIZES

TYPE

Continuous Inverted

PANEL JOINT DETAIL Square

BEAM WIDTH (mm): 100-300

DIMENSIONS (mm)

600x600/750x750/900x900/1000x1000/

1200x1200/1500x1500

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

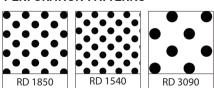


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



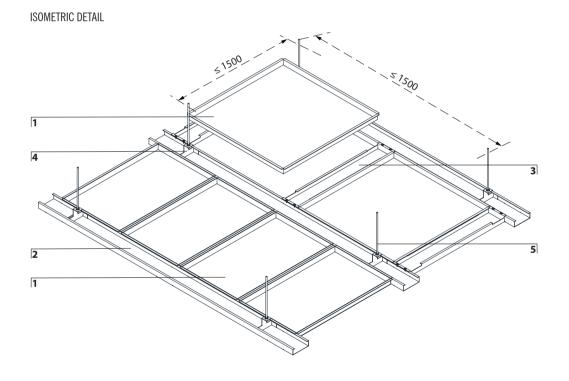
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 511 CONTINUOUS RAM 512 INVERTED



COMPONENTS

- 1 Panel
- 2 Main Beam Carrier
- 3 Cross Beam
- 4 Hanging Bracket
- 5 Threaded Rod
- 6 Anti-Vibration Clip (RH) ●
- **7** Wall Trim
- 8 Wall End Bracket •
- 9 Inverted Beam (Direct)
- 10 Inverted Beam (Indirect)

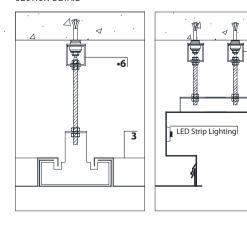




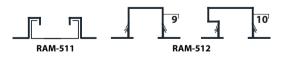
Optional

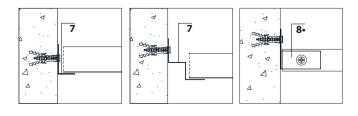
Custom sizes can be offered

SECTION DETAIL



PANEL-BEAM JOINT DETAIL







This threaded/flush beam profile ceiling is an ideal solution for integrating ceiling with demountable partition, hanging & support for light (weight) signs & multimedia materials. Available with sound attenuation panels. Can be manufactured in single & double skin. The beam profile can be used to integrate light fittings, AC grills, and other MEP services. Offered as recess, flush, or reveled edge with the panel. Panels are laid on the beam profile, which can be produced in multiple sizes in order to avoid cutting the panels. Lifts upwards for access to ceiling void. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

PANELS (mm)

Aluminum or Galvanized Steel:

0.5 to 1.0

BEAMS (mm)

Galvanized Steel:

0.5 to 2.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain

Perforated

Decorative Patterns

SIZE

TYPE

RAM 521: Threaded profile

RAM 522: Flat

BEAM WIDTH (mm): 100-300

DIMENSIONS (mm)

600x600/750x750/900x900/1000x1000/

1200x1200/1500x1500

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

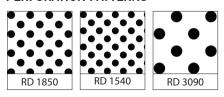


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



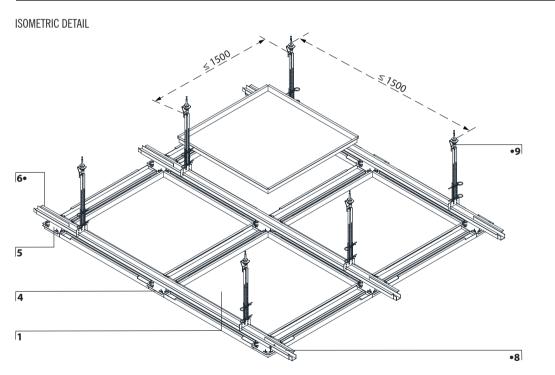
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 521 THREADED RAM 522 FLAT



COMPONENTS

- 1 Panel
- 2 Beam Channel (Threaded)
- 3 Beam Channel (Flush)
- 4 Junction Box
- 5 Junction Plate
- 6 Beam Stabilizer ●
- 7 Rigid Hanging System •
- 8 BS Splice •
- 9 Anti-Vibration Clip (RH) •
- 10 Wall Trim
- 11 Wall End Bracket •
- 12 Threaded Rod •

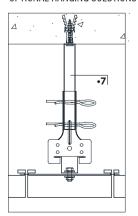




Optional

Custom sizes can be offered

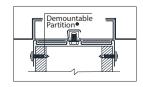
OPTIONAL HANGING SOLUTIONS



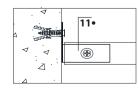
PANEL-BEAM JOINT DETAIL

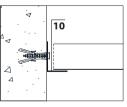


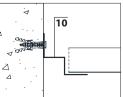
BEAM PARTITION DETAIL



WALL END BRACKET DETAIL









This system is supported on a heavy duty concealed plate is an ideal solution for integrating ceiling with demountable partition. Available with sound attenuation panels. Can be manufactured in single & double skin. The beam profile can be recess, flush, & reveled edge with the panel, and can be demountable independently in order to be replaced by light fittings, AC grills, or top track partitions. The beam is demountable with downward accessibility. The panel is demountable with upward accessibility. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

PANELS (mm)

Aluminum or Galvanized Steel:

0.5 to 1.0

BEAMS (mm)

Galvanized Steel:

0.5 to 2.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain

Perforated

Decorative Patterns

SIZE

TYPE

Hook

PANEL JOINT DETAIL

Square

BEAM WIDTH (mm): 100-300

DIMENSIONS (mm)

600x600/750x750/900x900/1000x1000/ 1200x1200/1500x1500

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

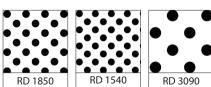


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

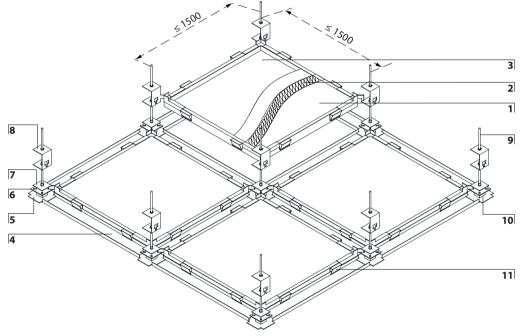
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 531 HOOK-ON

ISOMETRIC DETAIL



COMPONENTS

- 1 Panel
- 2 Rockwool Insulation •
- 3 Sound Attenuation Panel •
- 4 Main Beam Channel
- 5 Lay-in Junction Plate
- **6** Suspension Plate **7** Security Plate
- 8 Adjustable Hanging Bracket
- **9** Threaded Rod
- 10 Threaded Profile
- 11 Half Spring Clip
- 12 Hook Profile
- 13 Anti-Vibration Clip (TR) •
- 14 Wall End Bracket •
- 15 Wall Trim



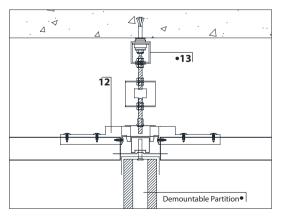
Luminous Panel •



Fire Resistant •

Custom sizes can be offered

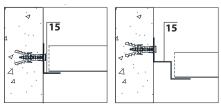
SECTION DETAIL



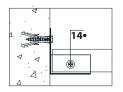
PANEL JOINT DETAIL



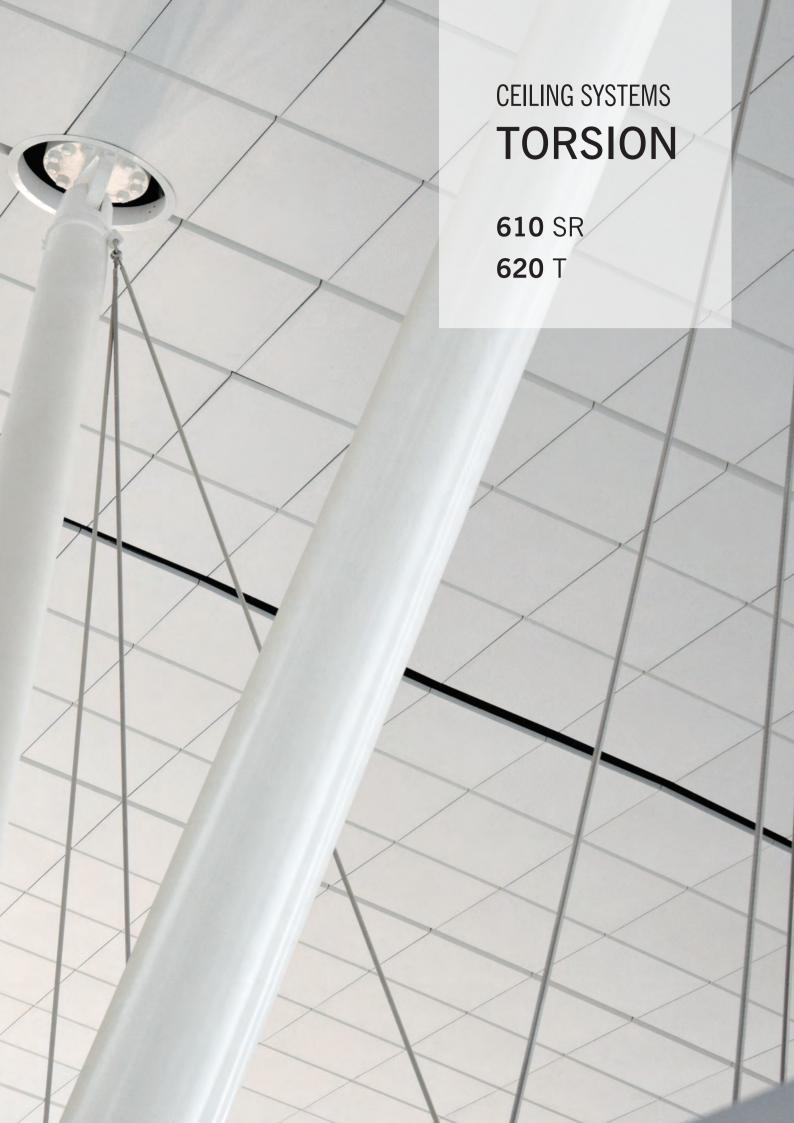
PERIMETER OPTIONS



WALL END BRACKET DETAIL









This hinge down type modular torsion spring ceiling system with reveled edge is an ideal solution for mega size panels and multiple height ceilings. It is highly sustainable and durable. Available with sound attenuation panels. Can be produced in double skin. Fully demountable with downward hinge down accessibility without using any special tool. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel: 0.5mm to 1.0mm.

- + Custom thickness are available upon request
- + Spring Material- Stainless Steel for both options

SURFACE FINISH

Plain

Perforated Decorative Patterns

SIZE

PANEL JOINT DETAIL 5-20 mm gap

DIMENSIONS (mm) 600x600/600x1200/1200x1200

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

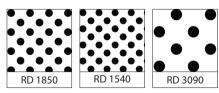


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



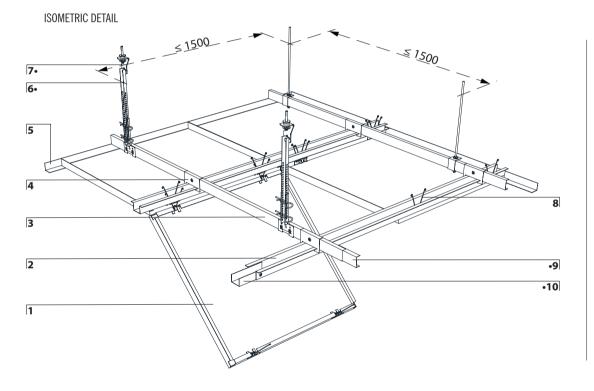
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 611 SQUARE/RECTANGULAR



COMPONENTS

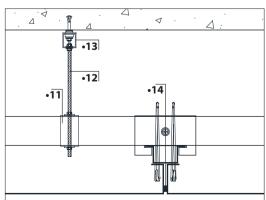
- 1 Panel
- 2 Torsion Spring Carrier
- 3 Stabilizer
- 4 TC Bracket
- 5 Wall Trim
- 6 Rigid Hanging System •
- 7 Anti-Vibration Clip (RH) ●
- 8 Torsion Spring Wire
- 9 ST Splice •
- 10 C Splice ●
- 11 Universal Bracket
- 12 Threaded Rod •
- 13 Anti-Vibration Clip (TR) •
- 14 Self-Adhesive Seal •
- **15** Spacer ●



Luminous Panel •

Custom sizes can be offered

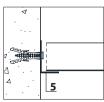
SECTION DETAIL

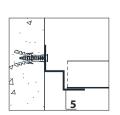


JOINT DETAIL











This hinge down type triangular torsion spring ceiling system with reveled edge is an ideal solution for mega size panels and multiple height ceilings. A highly sustainable and durable system. Available with sound attenuation panels. Can be manufactured in double skin. A heavy duty torsion spring system is with a secured panel to hinged down from the ceiling. Fully demountable with downward hinge down accessibility without using any special tool. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel: 0.5mm to 1.0mm.

- + Custom thickness are available upon request
- + Spring Material- Stainless Steel for both options

SURFACE FINISH

Plain

Perforated

Decorative Patterns

SIZE

TRIANGLE TYPE

Equilateral Isosceles Scalene

PANEL JOINT DETAIL

5-20 mm gap

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

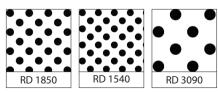


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



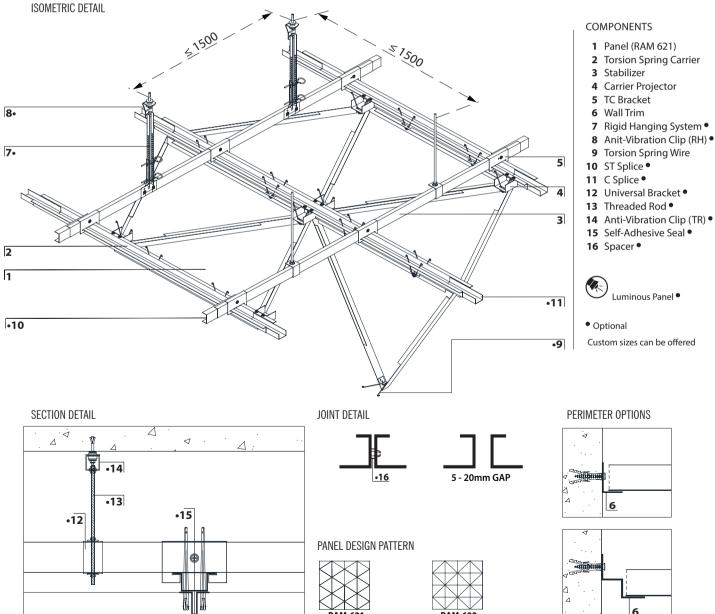
FIRE PERFORMANCE

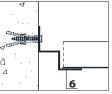
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 621 TRIANGULAR FLAT RAM 622 TRIANGULAR 3D

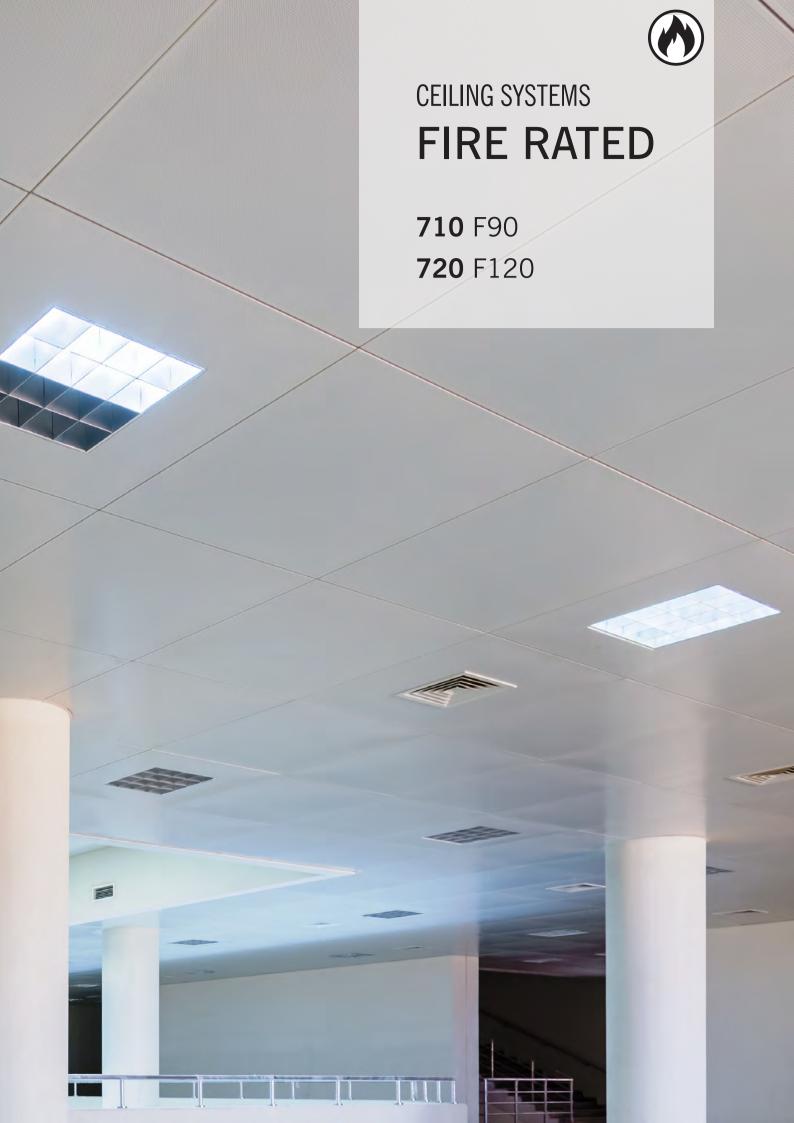














A clip in hinge down ceiling type, clipped in to a concealed suspension system with non-perforated finish making it an ideal solution for industrial & central kitchens. Fire resistance performance close to 2 hours, and classified as medium security. Hinge down accessibility using panel removal access key tool. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Galvanized Steel: 0.7mm

SURFACE FINISH

Plain Perforated Decorative Patterns

SIZE

PANEL JOINT DETAIL (mm) Square:

 $W \le 600 \text{mm} \times L \le 1800 \text{mm}$

3mm Beveled: 600x600

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation

COLORS

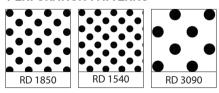


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece – NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation – NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to – 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85 - 0.96 tested as per ASTM E 1477.

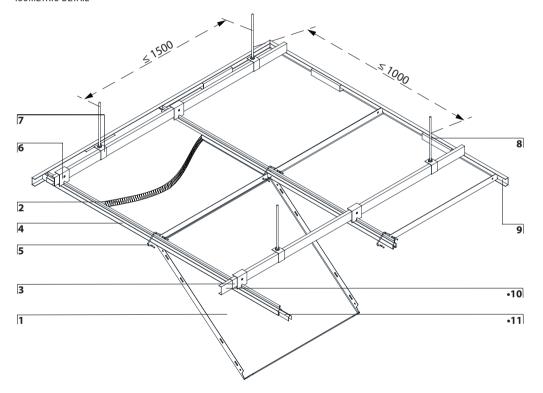


FIRE RESISTANCE

Fire Rated up to 115 minutes tested as per BS476: Part 23: 1987

RAM 711 F90

ISOMETRIC DETAIL

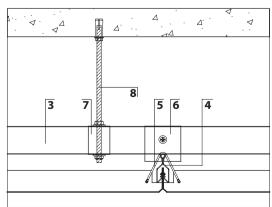


COMPONENTS

- 1 Panel
- 2 Rockwool Infill
- **3** Stabilizer
- 4 Narrow Carrier
- 5 Security Clip
- 6 NC Bracket
- 7 ST Bracket
- 8 Threaded Rod
- 9 Wall Trim
- 10 ST Splice •11 C Splice •
- 12 Wedge •
- **13** Anti-Vibration Clip (TR) ●
- Optional

Custom sizes can be offered

SECTION DETAIL

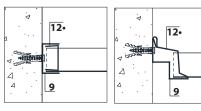


JOINT DETAILS

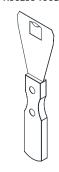


3mm Beveled

PERIMETER OPTIONS



ACCESS TOOL •





Concealed fire rated ceiling panels with spring action latch lock on beam profile. An ideal solution for integrating ceiling with demountable partition, hanging & support for light (weight) signs & multimedia materials. For use in airports, universities & office buildings. Fire resistance performance exceed to 2 hours. High acoustic performance of sound absorption as well as tested with high CAC 51db sound transmission. Fully demountable with downward accessibility using panel removal access key tool. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Galvanized Steel

PANELS (mm)

45mm

BEAMS (mm)

1.00mm

+ Custom thickness are available upon

SURFACE FINISH

Plain

Perforated

Decorative Patterns

SIZE

TYPE

concealed

PANEL JOINT DETAIL

Square

DIMENSIONS (mm)

600x600/750x750/900x900/1000x1000/ 1200x1200/1500x1500

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: $(70\mu - 80\mu)$

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

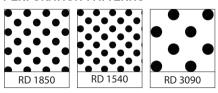


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.

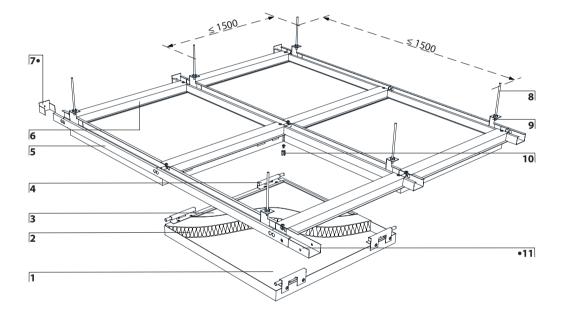


FIRE RESISTANCE

Fire Rated up to 132 minutes tested as per BS476: Part 23: 1987.

RAM 721 F120

ISOMETRIC DETAIL



COMPONENTS

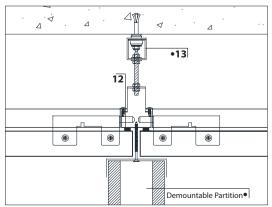
- 1 Panel
- 2 Rockwool Infill
- **3** Sound Attenuation Panel
- 4 Spring Action Latch Lock
- 5 Main Beam Channel
- 6 Cross Beam Channel
- 7 Wall End Bracket 8 Threaded Rod
- 9 Hanging Bracket
- 10 Cross Spacer
- 11 B Splice •
- 12 Self-Adhesive Seal •
- 13 Anti-Vibration Clip (TR) ●
- 14 Wall Trim
- 15 Wall End Bracket
- Optional

Custom sizes can be offered

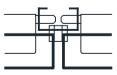


Fire Resistant •

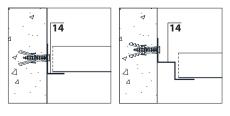
SECTION DETAIL



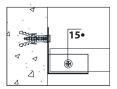
PANEL JOINT DETAIL



PERIMETER OPTIONS

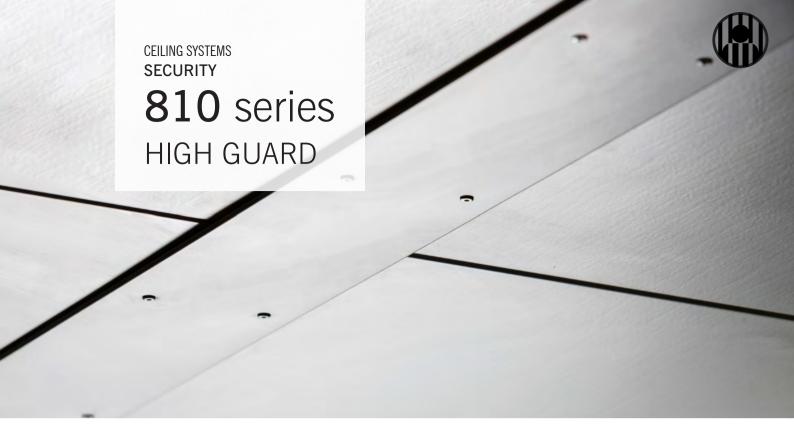


WALL END BRACKET DETAIL









A high guard ceiling type. Grade 1 is designed for maximum security and is ideal for prisons, detention centers, and other high security zones. Security access panel with master key solution available. Grade 4 is designed for light security and is ideal for airport washrooms, classrooms, light detention centers, and other light security zones. Security access panel with special tool available. Tested as per ASTM F2322-2012 standards for maximum Grade 1 criteria & tested for load bearing capacity. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Galvanized steel: RAM 811: 2.0mm RAM 812: 1.0mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

PANELS (mm) 600x600/600x1200

- +RAM 811 (with security brackets)
- +RAM 812 (with security lock)
- + Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

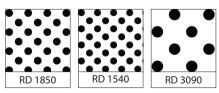


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



SECURITY

Complies with ASTM F2322 standards for physical assault on vertical fixed barries for detention and correctional facilities



FIRE PERFORMANCE

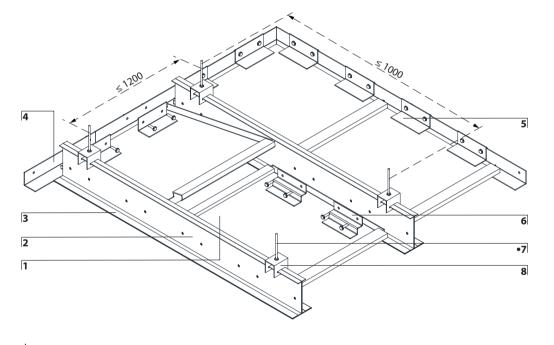
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 811 SECURITY CEILING GRADE 1 **RAM 812 SECURITY CEILING GRADE 4**

ISOMETRIC DETAIL

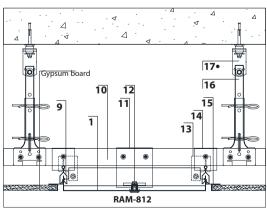


COMPONENTS

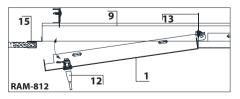
- 1 Panel
- 2 Carrier Profile
- 3 Carrier Cap
- 4 Wall Trim
- 5 L Wedge
- 6 W Wedge
- 7 Threaded Rod •
- 8 C Bracket
- 9 Narrow Carrier
- 10 Stabilizer
- 11 Security Plate
- 12 Budget Security Lock & Key
- 13 SL Bracket
- 14 NC Bracket
- 15 F Profile
- **16** Rigid Hanging System
- 17 Anti-Vibration Clip (RH) •
- Optional

Custom sizes can be offered

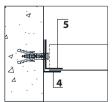
CROSS SECTION



ACCESS PANEL SECTION



PERIMETER OPTION









Slim profile and a modern look. For use in airports, metro stations, car showrooms & libraries. Ideal for open spaces with high ceilings to see through the void. Can be produced in variable modules between blades, with different depths, up to 4000mm long. Available in straight or formed V bent & solid line. Fully demountable. A special service tray can be produced to integrate light fitting & other MEP services in order to provide clear finish. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum: 0.5mm to 1.0mm. Galvanized Steel: 0.5mm to 0.7mm.

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

HEIGHTS (mm) RAM 911: 100-200 RAM 912: 300-600

SPACING (mm) 100/150/200/300

LENGTH (mm) **UP TO 3000**

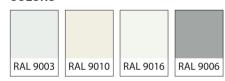
+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70µ -80µ)

+ High Performance Coatings like PESDF. PVDF and POLYAMIDE are available upon request.

COLORS

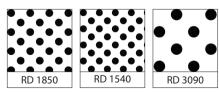


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



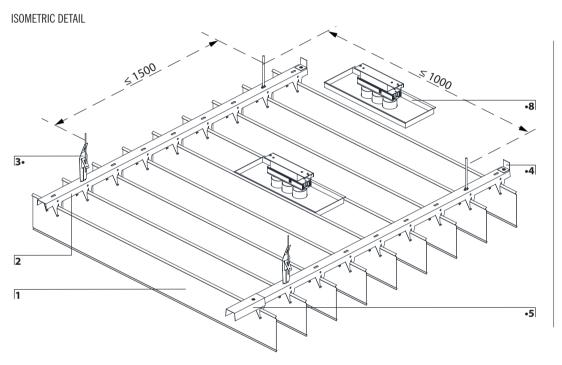
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 911 V LINE RAM 912 SOLID LINE

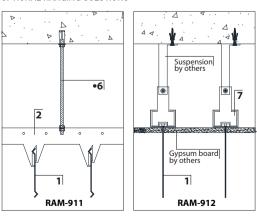


COMPONENTS

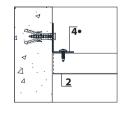
- 1 Blade
- 2 RAM 911 Carrier
- 3 Adjustment Clip •
- 4 Wall End Bracket •
- 5 C Splice ●
- 6 Threaded Rod •
- **7** Hanging Bracket
- 8 Service Tray •
- Optional

Custom sizes can be offered

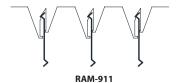
OPTIONAL HANGING SOLUTIONS

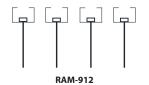


PERIMETER DETAILS



STRIP DETAIL







A deep profile U shape with a modern Look. For airports, metro stations, car showrooms & libraries. Ideal for open spaces & high ceiling level to view through the void. Can be produced in variable modules between baffles, in a variety of depths up to 300mm. Deep baffle 200-300mm, is available with the proper acoustic insulation and is fully demountable. Integrated light fittings & other MEP services are available in order to provide clear finish. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum:

RAM 921 : 0.5mm to 1.0mm RAM 922 : 0.7mm to 2.0mm

Galvanized steel:

RAM 921 : 0.5mm to 0.7mm RAM 922 : 0.6mm to 1.0mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

HEIGHTS (mm) RAM 921: Up to 100 RAM 922: Up to 300

WIDTH (mm)

RAM 921: 10/20/30 RAM 922: 25/40/100/200

LENGTH (mm) UP TO 3000

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

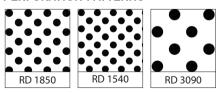


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



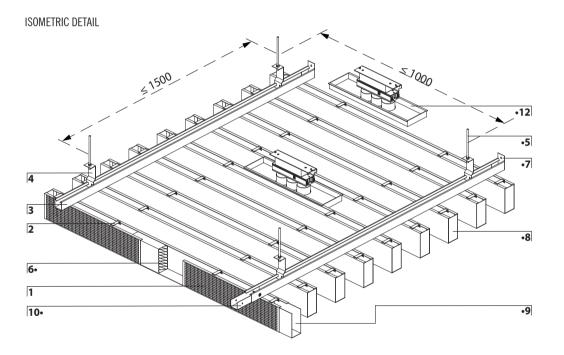
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 921 FINS RAM 922 BAFFLE

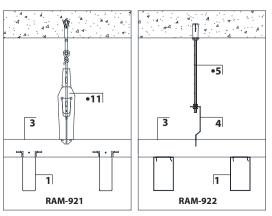


COMPONENTS

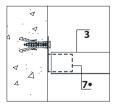
- 1 Baffle
- 2 Security Clip
- 3 Carrier
- 4 Hanging Bracket
- 5 Threaded Rod •
- 6 Rockwool •
- 7 Wall End Bracket •
- 8 End Cap •
- 9 RF Splice •
- 10 C Splice •
- 11 Adjustment Clip •
- 12 Service Tray
- Optional

Custom sizes can be offered

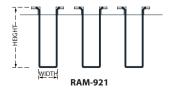
OPTIONAL HANGING SOLUTIONS

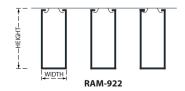


PERIMETER DETAILS



STRIP DETAILS







Non-conventional profile shape with a modern look. A unique round profile that can be manufactured in perforated finishes. For airports, metro stations, car showrooms & libraries. Can be produced in variable modules between baffles. Installed, can produce a curved or wave shape. It is fully demountable. A special service box can be produce to integrate light fitting & other MEP services in order to provide a clear finish. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

THICKNESS

Aluminum (mm) RAM 931: 0.5 to 0.7 RAM 932: 1.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

HEIGHTS (mm) RAM 931: 60 RAM 932: 45/55/70

RAM 932: 45/55/70/80

WIDTH (mm) RAM 931: 80 RAM 932: 25/50

SPACING (mm) RAM 931: 20

RAM 932: 75/100/150/200

LENGTH (mm) UP TO 3000

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

COLORS

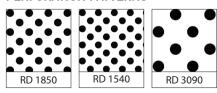


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



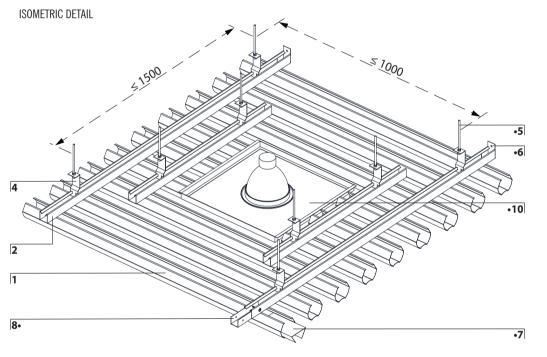
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 931 C LINE RAM 932 O LINE

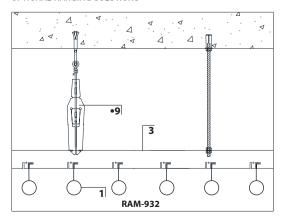


COMPONENTS

- 1 Tube
- 2 RAM 931 Carrier
- 3 RAM 932 Carrier
- 4 Hanging Bracket
- 5 Threaded Rod •
- 6 Wall End Bracket
- **7** T Splice 8 C Splice •
- 9 Adjustment Clip •
- 10 Service Box •
- Optional

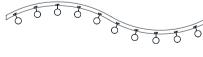
Custom sizes can be offered

OPTIONAL HANGING SOLUTIONS



PANEL DESIGN PATTERN



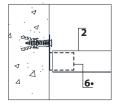


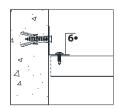
STRIP DETAILS





PERIMETER DETAILS







A non-conventional profile shape with a modern look. Ideal for open spaces & high ceiling level to view through the void. For airports, metro stations, car showrooms & libraries. Can be produced with variable modules in between. Fully demountable. Special service tray can be produce to integrate light fitting & other MEP services in order to provide clear finish. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

THICKNESS

Aluminum (mm) 0.5 to 0.6

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

HEIGHT (mm) 150 - 400

WIDTH (mm) 50 - 100

LENGTH

Up to 3000mm

SPACING (mm) 50/100/150

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

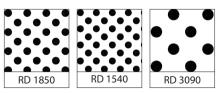


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

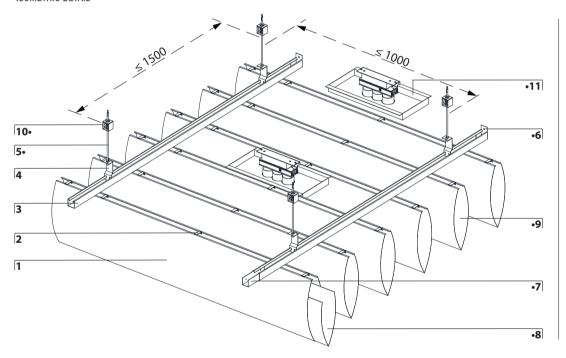
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 941 DIASPACE

ISOMETRIC DETAIL

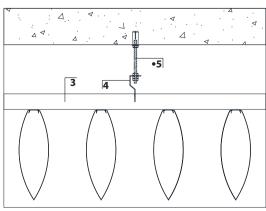


COMPONENTS

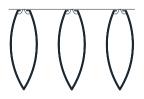
- 1 Baffle
- 2 Security Clip
- 3 Carrier
- 4 Hanging Bracket
- 5 Threaded Rod •
- 6 Wall End Bracket ●
- **7** C Splice ●
- 8 D Splice •
- 9 End Cap ●
- 10 Anti-Vibration Clip (TR) •
- 11 Service Tray •
- Optional

Custom sizes can be offered

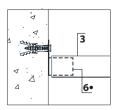
SECTION DETAIL



STRIP DETAIL



PERIMETER DETAIL





An architectural solution for connecting ceilings to walls. Ideal for open spaces & high ceiling level to view through the void. For airports, metro station, car showroom, & libraries. Can be produced in horizontal as well as vertical curvature and in variable depths up to 1000mm. Acoustic insulation for optimal performance and is fully demountable. A special service tray can be produced to integrate light fitting & other MEP services in order to provide clear finish. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum (mm) 0.5 to 1.0

Galvanized Steel (mm) 0.5 to 0.9

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

HEIGHT (mm): Up to 50mm **WIDTH** (mm): 10/20/30 **LENGTH**: Up to 3000mm

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

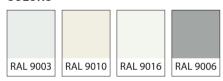
+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

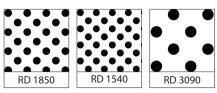


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

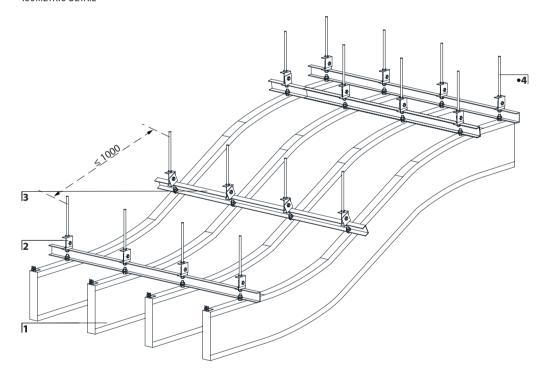
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 951 3D

ISOMETRIC DETAIL

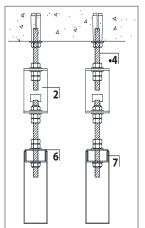


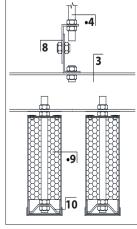
COMPONENTS

- 1 Baffle
- 2 Flexible Bracket
- 3 Stabilizer
- 4 Threaded Rod •
- **5** F Splice
- **6** Expension Plate
- 7 Hanging Bracket
- 8 L Angle Profile
- 9 Backing Board •
- 10 Nut Bracket
- Optional

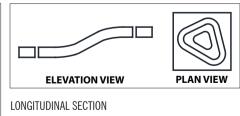
Custom sizes can be offered

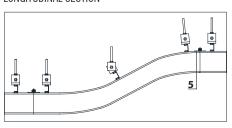
OPTIONAL HANGING SOLUTIONS



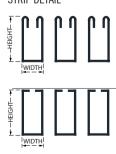


PANEL DESIGN PATTERN





STRIP DETAIL









A multi-dimensional ceiling profile. Can be used on walls & high levels. Light weight and fully demountable. An acoustic pad can added to improved acoustic performance. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

THICKNESS

Aluminum (mm) 0.7 to 1.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

WIDTH (mm): 600

LENGTH (mm): Up to 2000

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

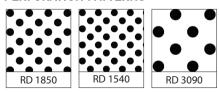


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

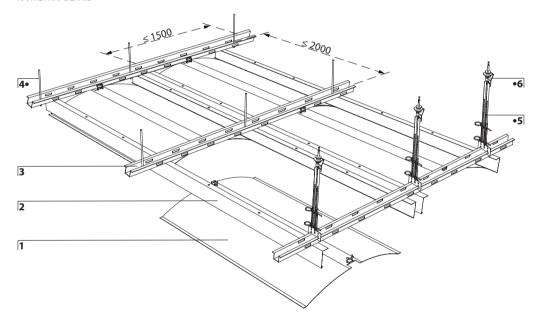
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 1011 WINGS

ISOMETRIC DETAIL

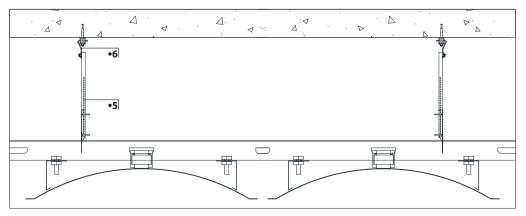


COMPONENTS

- 1 Panel
- 2 Inverted L Bracket
- 3 Main Carrier
- **4** Threaded Rod ●
- 5 Rigid Hanging System •
- 6 Anti-Vibration Clip ●
- Optional

Custom sizes can be offered

OPTIONAL HANGING SOLUTIONS







A multi-dimensional ceiling profile. Can be installed as Island module or wall to wall ceiling. Perforated to provide high acoustic performance. Can be cut to size as per project requirement. Fully demountable. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel 0.5mm to 0.9mm

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

WIDTH (mm): 300–600 LENGTH (mm): 600–2000 EDGE DETAIL

EDGE DETA Square

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS

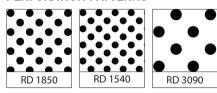


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



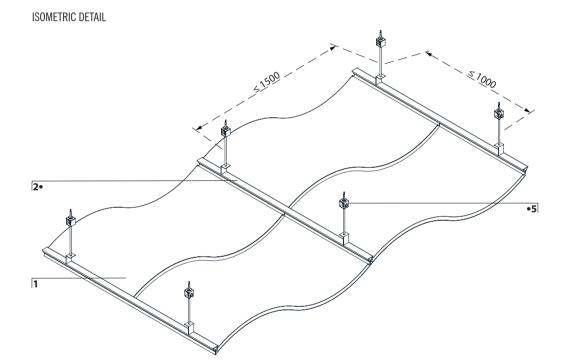
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 1021 WAVES

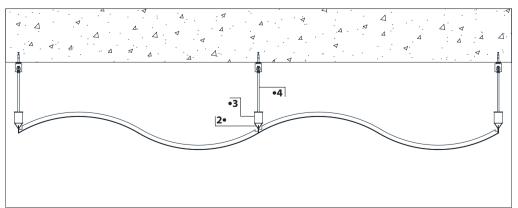


COMPONENTS

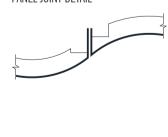
- 1 Panel
- 2.1 Narrow Carrier
- 2.2 Spring Tee Carrier •
- 2.3 Z Carrier •
- **2.4** Torsion Spring Carrier ●
- 3 Direct Hanging Bracket •
- 4 Threaded Rod •
- 5 Anti-Vibration Clip (TR) ●
- Optional

Custom sizes can be offered

OPTIONAL HANGING SOLUTIONS



PANEL JOINT DETAIL









A modern looking ceiling profile ideal for open spaces, in airports, metro stations, public transport facilities, & libraries. Can be used as a security ceiling when the mesh is produced in high gauge and proper suspension. Acoustic insulation can provide high acoustics performance. Fully demountable, complying with any accessibility requirements. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel: 0.5mm to 3.0mm

+ Custom thickness are available upon request

SURFACE FINISH

Expanded Woven

SIZE

WIDTH (mm): 300–1200 LENGTH (mm): 600–2400

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70 μ -80 μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLORS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



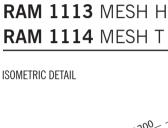
FIRE PERFORMANCE

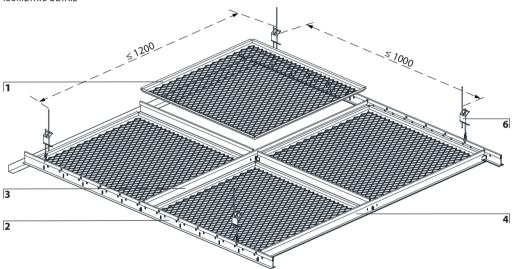
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

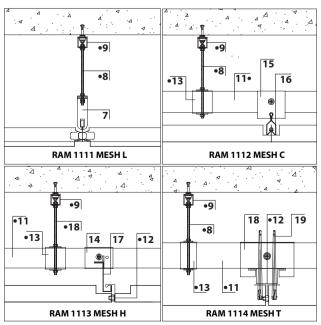
Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 1111 MESH L RAM 1112 MESH C

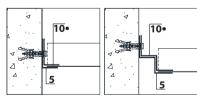




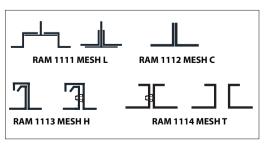
OPTIONAL HANGING SOLUTIONS



PERIMETER OPTIONS



PANEL JOINT DETAIL



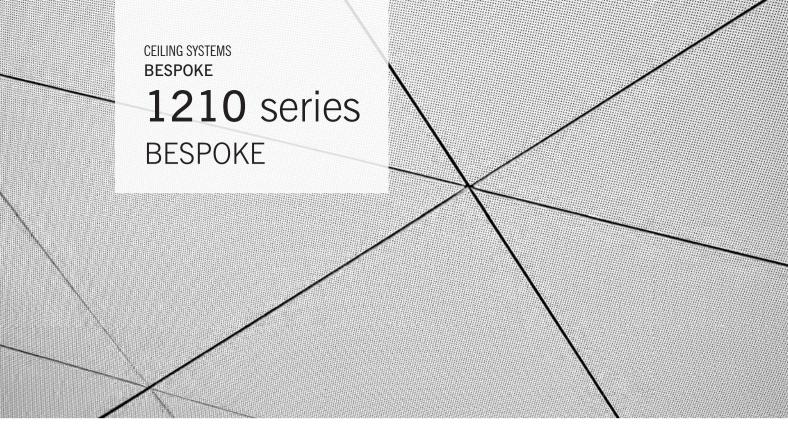
COMPONENTS

- 1 Panel
- 2 Main Carrier
- 3 Primary Cross Tee
- 4 Secondary Cross Tee
- 5 Wall Trim
- 6 Double Adjustment Clip
- 7 Direct Suspension Bracket
- 8 Threaded Rod •
- 9 Anti-Vibration Clip (TR) •
- 10 Wedge •
- 11 Stabilizer •
- 12 Spacer •
- 13 U Bracket •
- 14 Stabilizer Bracket
- 15 Suspension Bracket
- 16 Narrow Carrier
- 17 Z Carrier
- 18 TC Bracket
- 19 Torsion Spring Wire
- Optional

Custom sizes can be offered







An open & no limitation design ceiling. Can be custom manufactured to architect specifications. Ideal for complex geometric sizes & shapes. Fully demountable, complying with any accessibility requirements. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel (mm): 0.5 to 2.0

+ Custom thickness are available upon

SURFACE FINISH

Plain Perforated

SIZE

WIDTH (mm): ≤1200 **LENGTH** (mm): ≤4000

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: (70μ -80μ)

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation

COLORS

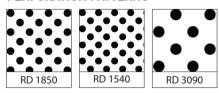


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00

Tested as per ASTM E1414-11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB Perforated & Sound Attenuation cover



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

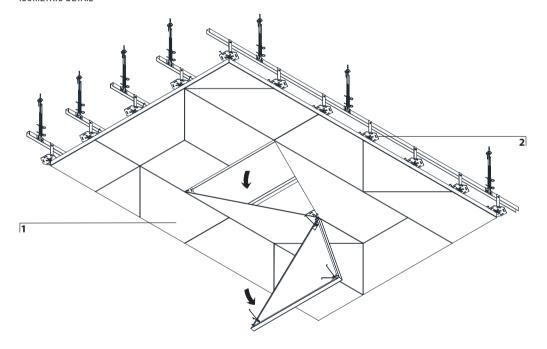
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 1211 BESPOKE

ISOMETRIC DETAIL

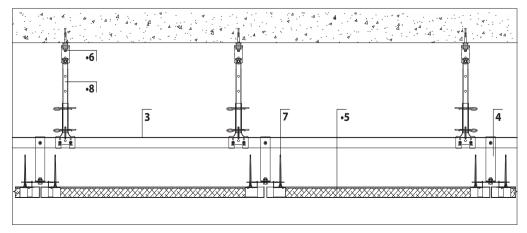


COMPONENTS

- 1 Panel
- 2 Node Plate
- 3 Stabilizer
- 4 Hanging Bracket
- 5 Rockwool •
- 6 Anti-Vibraion Clip (TR) ●
- 7 Torsion Spring Wire
- 8 Rigid Hanging System •
- Optional

Custom sizes can be offered

SECTION DETAILS



PANEL JOINT DETAIL







WALL SYSTEMS **DEMOUNTABLE INTERNAL** METAL CLADDING 2010 series INTERNAL WALL **COVERING**

An ideal solution for internal wall covering. Effective impact protection for high traffic areas. High Acoustic performance. It's strong structure is suitable for integrated TV screens, sign boards & speakers. Progressive accessibility with easy access for services & maintenance without any access tool. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum(mm): 1.0 to 3.0 Galvanized Steel (mm): 0.75 to 2.0

+ Custom thickness are available upon request

SURFACE FINISH

Perforated

SIZE

HEIGHT (mm): 300-750mm

LENGTH (mm):

RAM 2011, 2012, 2013:

≤3000 (Aluminum)

≤ 2000 (Galvanized Steel)

RAM 2014:

≤ 2000 (Galvanized Steel)

+ Custom sizes are available upon request

COATING

Polyester Powder Coating: $(70\mu - 80\mu)$

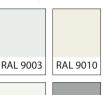
+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is nonflammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLOR / FINISH



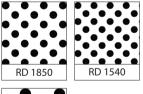


SPECIAL FINISHES



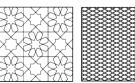
- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





SURFACE PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal cladding is LR - 0.85-0.96 tested as per ASTM



FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)



SOFT BODY IMPACT TEST

Tested as per CWCT 75/76 - Impact performance of building envelopes.

Soft body test energy exposure category B

Serviceability - Class 1 (Impact energy 120 J)

Safety performance - Negligible risk (Impact energy 500 J)



ANTI DRUMMING

High performance sound deadening and reduced vibrations (resonance)

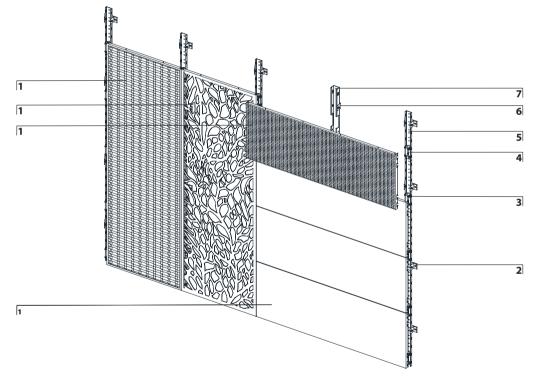
RAM 2011 SOLID PLAIN

RAM 2012 PERFORATED

RAM 2013 EXPANDED METAL MESH

RAM 2014 ARCHITECTURAL FINISH

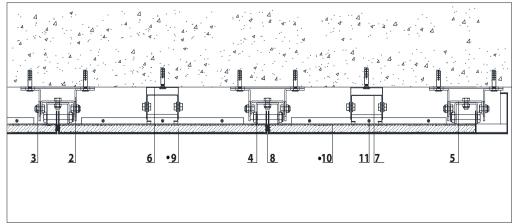
ISOMETRIC DETAIL



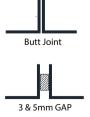
COMPONENTS

- 1 Panel
- 2 Omega Profile
- 3 Bolts & Nuts
- 4 Carrier Bracket
- 5 Adjustable C Channel
- **6** Reinforcement Bracket
- Reinforcement Channel
- Self-Adhesive Seal
- 9 Backing Board •
- 10 Backing Panel •
- 11 Blind Rivet
- 12 Rockwool •

SECTION DETAIL



PANEL JOINT DETAIL





An ideal solution for internal wall covering. Effective impact protection for high traffic areas. It's strong structure is suitable for integrated TV screens, sign boards & speakers. Progressive accessibility. Easy access for services & maintenance without any access tool. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum(mm): 1.0 to 3.0 Galvanized Steel (mm): 0.75 to 2.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

HEIGHT (mm): 300-750

LENGTH (mm):

RAM 2021, 2022, 2023:

≤3000 (Aluminum)

≤ 2000 (Galvanized Steel)

RAM 2024:

- ≤ 2000 (Galvanized Steel)
- + Custom sizes are available upon request

COATING

Polyester Powder Coating: $(70\mu - 80\mu)$

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLOR / FINISH



SPECIAL FINISHES

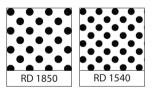
RAL 9006

RAL 9016



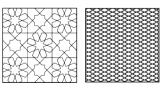
- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





SURFACE PATTERNS





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

Maximum NRC achieved with Acoustic Black fleece - NRC 0.75

Maximum NRC achieved with Acoustic Black Fleece and Rockwool Insulation - NRC 1.00



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.

RAM 2021 SOLID PLAIN

RAM 2022 PERFORATED

RAM 2023 EXPANDED METAL MESH

RAM 2024 ARCHITECTURAL FINISH



LIGHT REFLECTANCE (LR)

Achieved by the metal cladding is LR - 0.85-0.96 tested as per ASTM



FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)soft body impact test



SOFT BODY IMPACT TEST

Tested as per CWCT 75/76 - Impact performance of building envelopes.

Soft body test energy exposure category B

Serviceability - Class 1 (Impact energy 120 J)

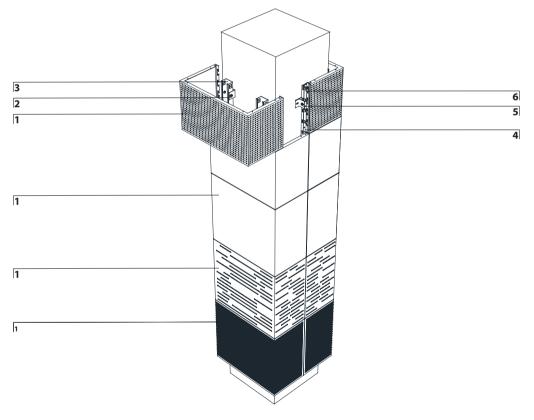
Safety performance - Negligible risk (Impact energy 500 J)



ANTI DRUMMING

High performance sound deadening and reduced vibrations (resonance)

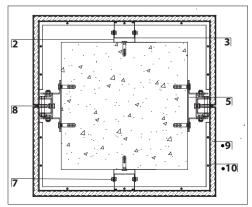
ISOMETRIC DETAIL

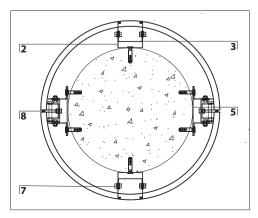


COMPONENTS

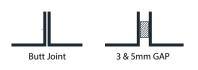
- 1 Panel
- 2 Reinforcement Bracket
- 3 Reinforcement Channel
- 4 Adjustable C Channel
- 5 Omega Profile
- 6 Carrier Bracket
- 7 Bolts & Nuts
- 8 Self-Adhesive Seal
- 9 Backing Board •
- 10 Backing Panel •
- 11 Rcockwool •

SECTION DETAILS

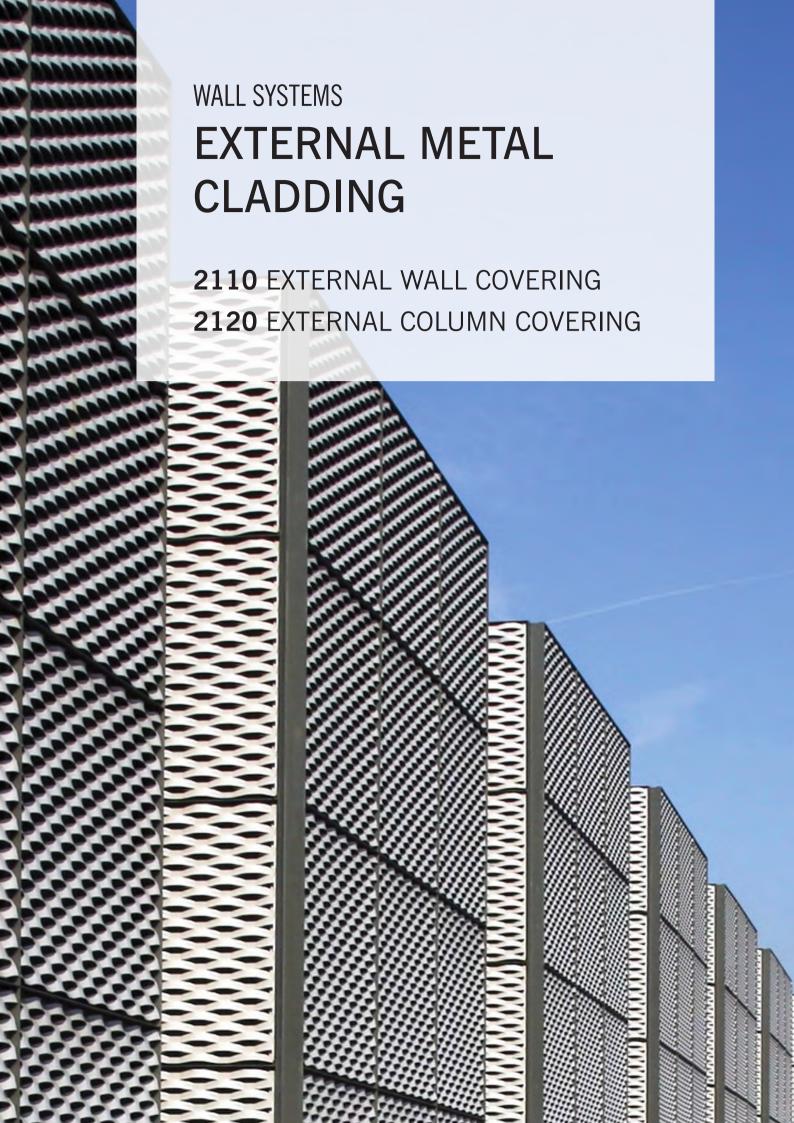




PANEL JOINTS DETAIL







WALL SYSTEMS

EXTERNAL METAL CLADDING

2110 series

EXTERNAL WALL COVERING



An ideal solution for external wall covering. Its strong structure is suitable for integrated TV screens, sign boards & speakers. Progressive accessibility. Offered in a wide range of designs, sizes, colors, perforations & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum (mm): 1.0-3.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

HEIGHT (mm): 300–1500 **LENGTH** (mm): up to 3000

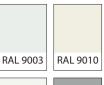
+ Custom sizes are available upon request

COATING

Polyester Powder Coating: $(70\mu - 80\mu)$

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

COLOR / FINISH



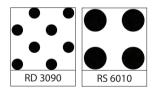


SPECIAL FINISHES

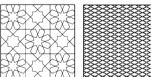


- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS



SURFACE PATTERNS





WIND RESISTANCE

Complies with CWCT Sec 1,12:2005 Wind Resistance-Serviceability & Safety (3600 Pa)

AIR PERMEABILITY

Complies with CWCT Sec 5:2005 Air Leakage (Test pressure +/- 600 Pa)



LIGHT REFLECTANCE (LR)

Achieved by the metal cladding is LR - 0.85-0.96 tested as per ASTM E 1477.



WATER RESISTANCE

Complies with CWCT Sec 6,7:2005 Water Penetration – Static Method & Dynamic Aero Engine Test (Test pressure 600 Pa)



IGNITION PERFORMANCE FOR **PLASTICS**

Complies with ASTM D1929-16 Standard Test Method for Determining Ignition Temperature of Plastics

- * Flash Ignition Temprature 458 °C
- * Self-Ignition Temprature 458 °C



FIRE PERFORMANCE

Complies with UNE-EN 13501-1:2007 +A1:2010 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests (CLASS A2-S1, d0)

Complies with NFPA 285-2012 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components

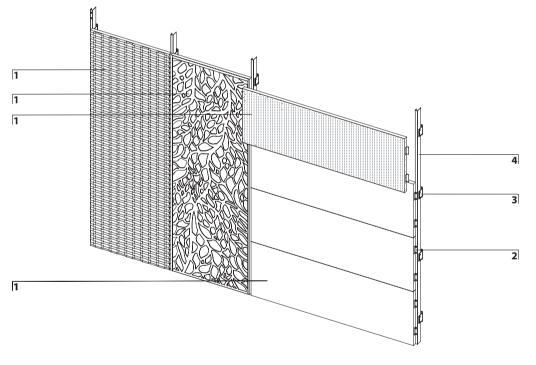
RAM 2111 SOLID PLAIN

RAM 2112 PERFORATED

RAM 2113 EXPANDED METAL MESH

RAM 2114 ARCHITECTURAL FINISH

ISOMETRIC DETAIL

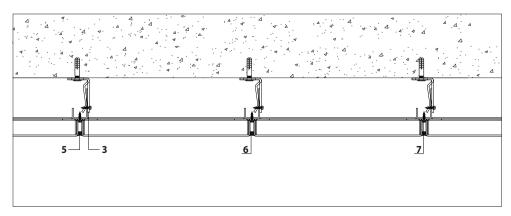


COMPONENTS

- 2 L Angle Profile
- 3 Wall Bracket
- 4 J Profile
- 5 Filler Profile
- 6 Fire Rated Silicone Sealant
- 7 Self Drilling Screw

Custom sizes can be offered

SECTION DETAILS



PANEL JOINTS DETAILS



WALL SYSTEMS
EXTERNAL METAL CLADDING

2120 Series

EXTERNAL COLUMN
COVERING

16 rammetal.com

An ideal solution for external wall covering. Its strong structure is suitable for integrated TV screens, sign boards & speakers. Progressive accessibility. Offered in a wide range of designs, sizes, colors, perforations & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum (mm): 1.0-3.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

HEIGHT (mm): 300–1500 **LENGTH** (mm): up to 3000

+ Custom sizes are available upon request

COATING

Polyester Powder Coating: $(70\mu - 80\mu)$

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

COLOR / FINISH



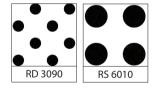


SPECIAL FINISHES

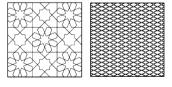


- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS



SURFACE PATTERNS





WIND RESISTANCE

Complies with CWCT Sec 1,12:2005 Wind Resistance-Serviceability & Safety (3600 Pa)

AIR PERMEABILITY

Complies with CWCT Sec 5:2005 Air Leakage (Test pressure +/- 600 Pa)



LIGHT REFLECTANCE (LR)

Achieved by the metal cladding is LR - 0.85-0.96 tested as per ASTM E 1477.



WATER RESISTANCE

Complies with CWCT Sec 6,7:2005 Water Penetration - Static Method & Dynamic Aero Engine Test (Test pressure 600 Pa)



IGNITION PERFORMANCE FOR **PLASTICS**

Complies with ASTM D1929-16 Standard Test Method for Determining Ignition Temperature of Plastics

- * Flash Ignition Temprature 458 °C
- * Self-Ignition Temprature 458 °C



FIRE PERFORMANCE

Complies with UNE-EN 13501-1:2007 +A1:2010 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests (CLASS A2-S1, d0)

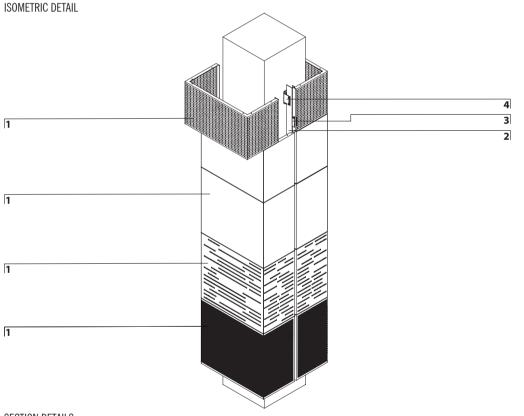
Complies with NFPA 285 - 2012 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components

RAM 2121 SOLID PLAIN

RAM 2122 PERFORATED

RAM 2123 EXPANDED METAL MESH

RAM 2124 ARCHITECTURAL FINISH

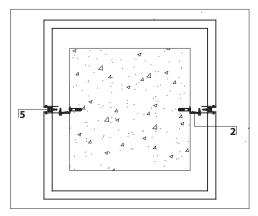


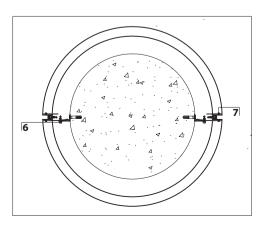
COMPONENTS

- 1 Panel
- 2 J Profile
- 3 L Angle Profile
- 4 Wall Bracket
- 5 Fire Rated Silicone Sealant
- 6 Self Drilling Screw
- 7 Blind Rivet

Custom sizes can be offered

SECTION DETAILS





PANEL JOINTS DETAIL









An open & no limitation design cladding. Can be custom manufactured to architect specifications. Ideal for complex geometric sizes & shapes. Effective impact protection for high traffic areas. High Acoustic performance. It's strong structure is suitable for integrated TV screens, sign boards & speakers. Progressive accessibility with easy access for services & maintenance without any access tool. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel (mm): 1.0 to 3.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

WIDTH (mm): ≤2000

LENGTH (mm):

- ≤3000 (Aluminum)
- ≤2000 (Galvanized Steel)
- + Custom sizes are available upon request

COATING

Polyester Powder Coating: $(70\mu - 80\mu)$

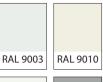
+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

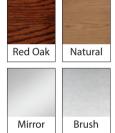
Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLOR / FINISH



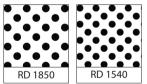


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS







ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal cladding is LR - 0.85-0.96 tested as per ASTM E 1477.



FIRE PERFORMANCE

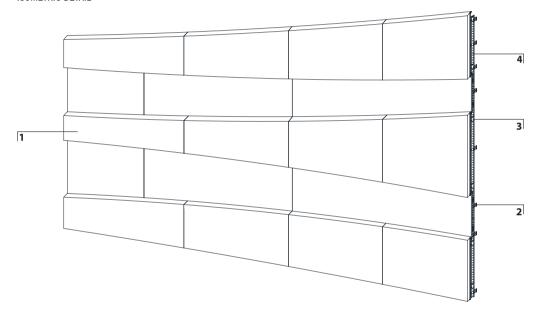
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 2211 BESPOKE WALL PANEL

ISOMETRIC DETAIL

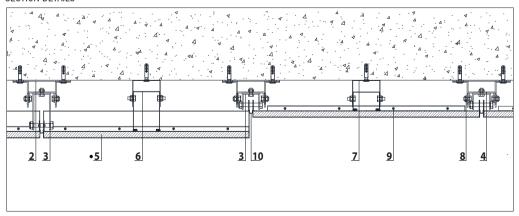


COMPONENTS

- 1 Panel
- 2 Omega Profile
- 3 Carrier Bracket
- 4 Adjustable C Channel
- 5 Backing Board •
- 6 Reinforcement Channel
- 7 Reinforcement Bracket
- 8 Bolts & Nuts
- 9 Blind Rivet
- 10 U Profile
- 11 Rockwool •

Custom sizes can be offered

SECTION DETAILS



PANEL JOINTS DETAIL





SHADE CONTROL SHADE CONTROL

3010 SHADE CONTROL





For a modern look and an ideal solution for light weight canopies. Structurally rigid, high quality paint with UV resistance. A hollow profile that reduces sunlight transmission. For use in parking, ground, stadium, & other open areas. Offered in a wide range of sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum (mm): 0.5 to 0.6 Galvanized Steel (mm): 0.45 to 0.5

+ Custom thickness are available upon request

SURFACE FINISH

Plain

SIZE

HEIGHT (mm): 300 WIDTH (mm): 100 LENGTH (mm): 3000 **SPACING** (mm): 50/100/150

+ Custom sizes are available upon request

COATING

Polyester Coating: ((5 μ (Back) + 20 μ (Face)) Polyester Powder Coating: $(70\mu - 80\mu)$

+ High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

COLORS

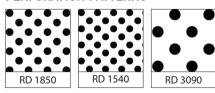


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS





FIRE PERFORMANCE

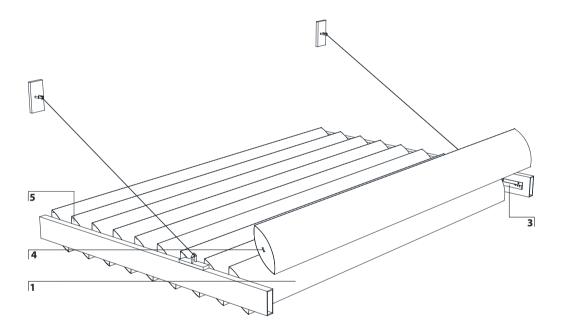
Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 3011 SHADE CONTROL

ISOMETRIC DETAIL

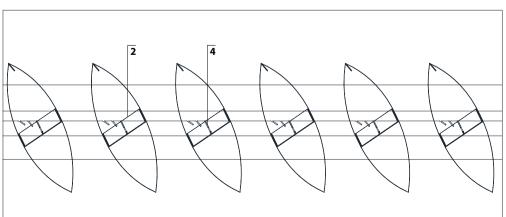


COMPONENTS

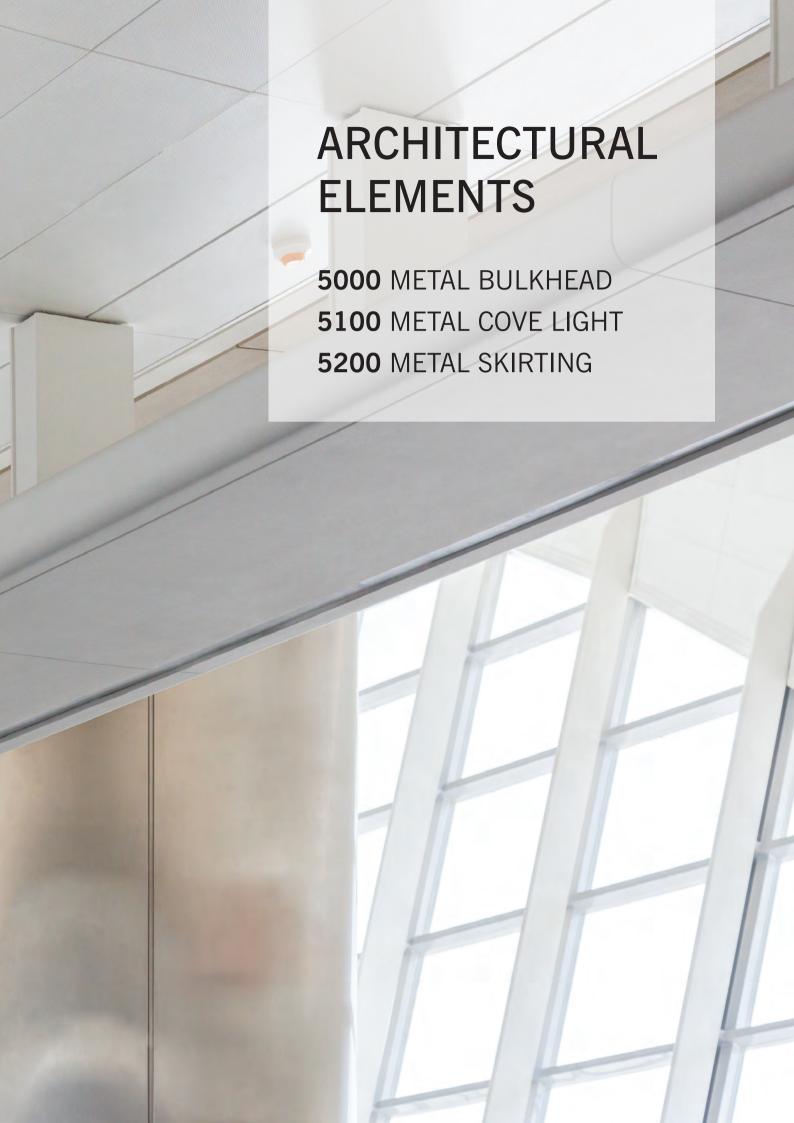
- **1** Baffle
- 2 U Channel
- 3 Carrier Profile
- 4 L Hook Profile
- 5 End Cap

Custom sizes can be offered

SECTION DETAIL







ARCHITECTURAL ELEMENTS

5010 series

METAL BULKHEAD Ideal for connecting ceilings with other building elements. Can be manufactured to integrate light fittings, AC grills, and other MEP services. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel (mm): 0.6 to 3.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

LENGTH (mm): ≤3000

WIDTH (mm): 300 to 1000

+ Custom sizes are available upon request

COATING

Polyester Coating: $((5\mu \text{ (Back)} + 20\mu \text{ (Face)})$

Polyester Powder Coating: $(70\mu - 80\mu)$

 + High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLOR / FINISH



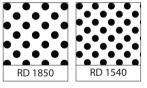


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERNS









ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR – 0.85-0.96 tested as per ASTM E 1477.



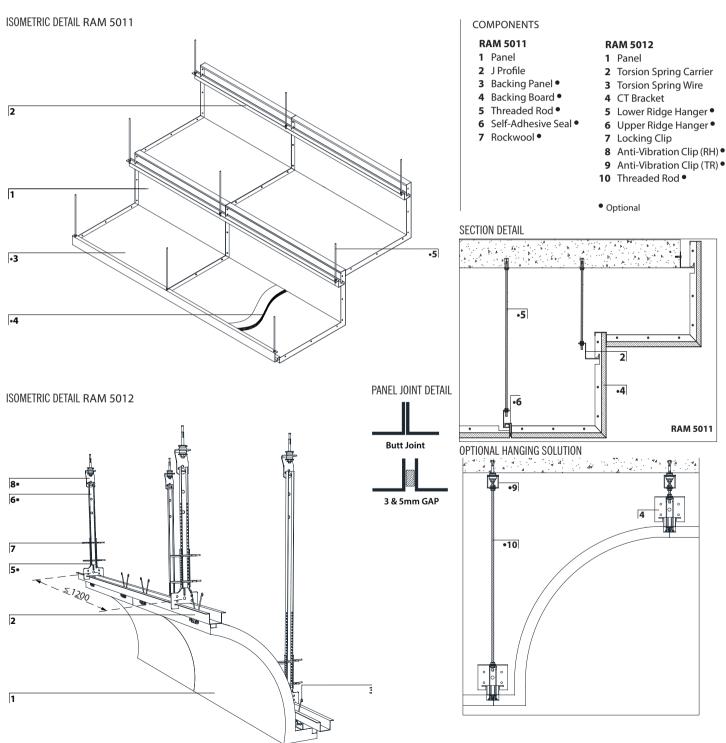
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 5011 METAL BULKHEAD RAM 5012 CURVED METAL BULKHEAD



5110 series
METAL COVE
LIGHT

Ideal for integrating light fixtures. Can be custom manufactured to architect specifications in a variety of shapes & depths for optimal light reflection. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade.

THICKNESS

Aluminum or Galvanized Steel (mm): 0.5 to 1.00

+ Custom thickness are available upon request

SURFACE FINISH

Plain Perforated

SIZE

LENGTH (mm): ≤3000 **WIDTH** (mm): ≤300

+ Custom sizes are available upon request

COATING

Polyester Coating: $((5\mu \text{ (Back)} + 20\mu \text{ (Face)})$

Polyester Powder Coating: $(70\mu - 80\mu)$

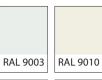
 + High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

INSULATION

Acoustic Black Fleece is non-flammable and meets the standard DIN 4102 / B1. Classification A1 according to EN 13501-1.

Rockwool slabs conforming to ASTM C612 and equivalent BS 3958-5 are provided for acoustic insulation.

COLOR / FINISH



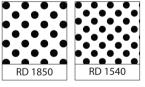


SPECIAL FINISHES



- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.

PERFORATION PATTERN









ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenuation.

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation -NRC 1.00



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling is LR - 0.85-0.96 tested as per ASTM E 1477.



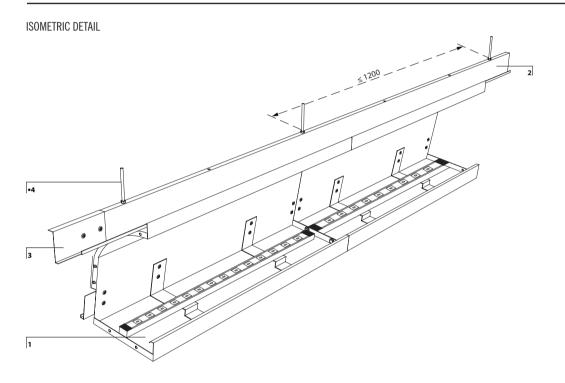
FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

RAM 5111 METAL COVE LIGHT

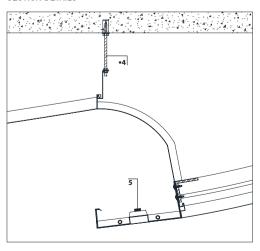


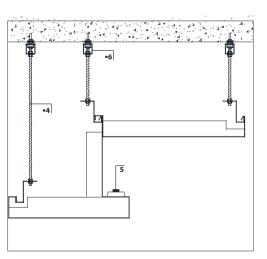
COMPONENTS

- 1 Panel
- 2 J Carrier Profile
- 3 C Splice ●
- 4 Threaded Rod •
- **5** Lighting Fixture (By Other)
- 6 Anti-Vibration Clip (TR) •

Custom sizes can be offered

SECTION DETAILS





PANEL JOINT DETAIL





Used for walls in a variety of finishes such as aluminum anodized, stainless steel, & powder coated aluminum. Can be manufactured in various heights & shapes. Offered in a wide range of designs, sizes, colors & finishes.

FEATURES

MATERIAL

Aluminum Alloy as per EN AW 3000 or 5000 series.

Zinc Plated Galvanized Steel G90 grade. Stainless Steel grade SS304 or SS316L

THICKNESS

Aluminum, Galvanized Steel or Stainless Steel (mm): 0.6 to 2.0

+ Custom thickness are available upon request

SURFACE FINISH

Plain

SIZE

LENGTH (mm): \leq 3000 WIDTH (mm): \leq 300

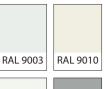
+ Custom sizes are available upon request

COATING

Polyester Coating: $((5\mu \text{ (Back)} + 20\mu \text{ (Face)})$ Polyester Powder Coating: $(70\mu - 80\mu)$

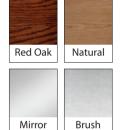
 + High Performance Coatings like PESDF, PVDF and POLYAMIDE are available upon request.

COLOR / FINISH

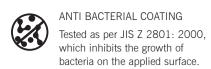


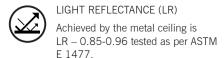


SPECIAL FINISHES



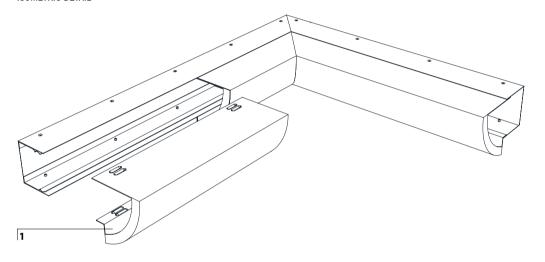
- + See page 144 for additional colors & special finishes available
- + Special finishes can be provided in lamination, sublimation or coil coating process.





RAM 5211 METAL SKIRTING

ISOMETRIC DETAIL

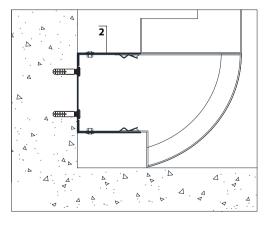


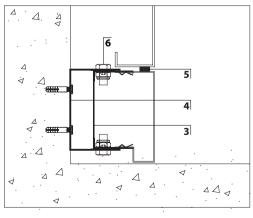
COMPONENTS

- 1 Panel
- 2 Carrier Profile
- **3** Skirting Spring Channel
- 4 Skirting Bracket5 Self-Adhesive Seal •
- 6 Bolts & Nuts

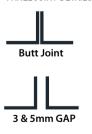
Custom sizes can be offered

SECTION DETAILS





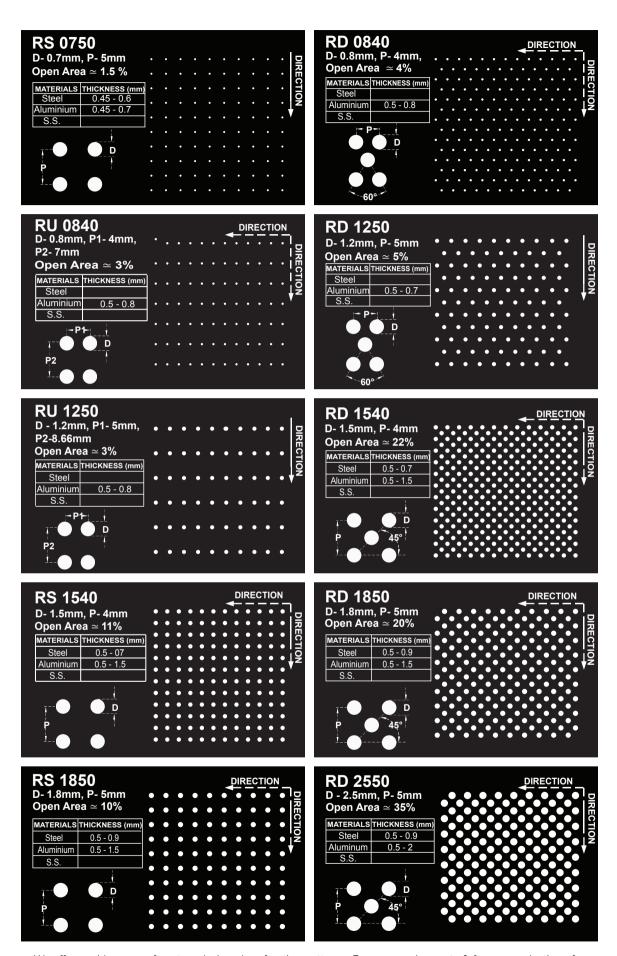
PANEL JOINT DETAILS



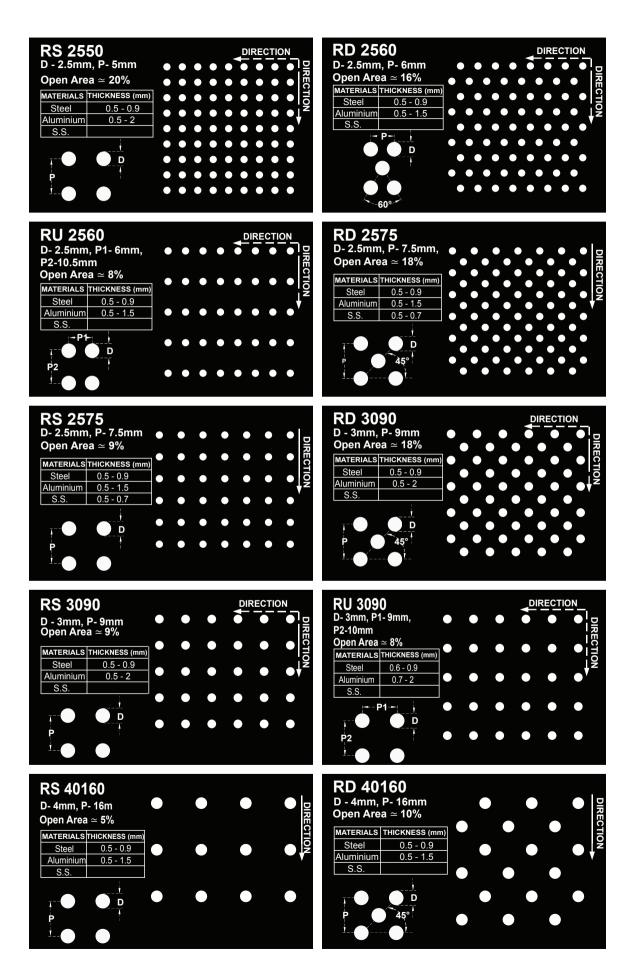


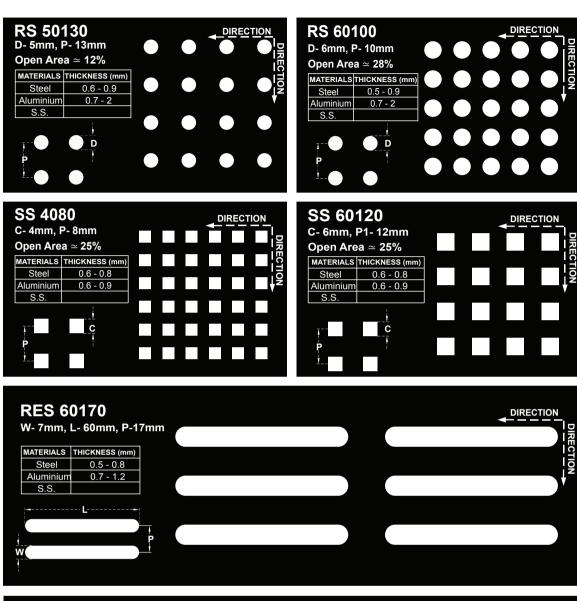


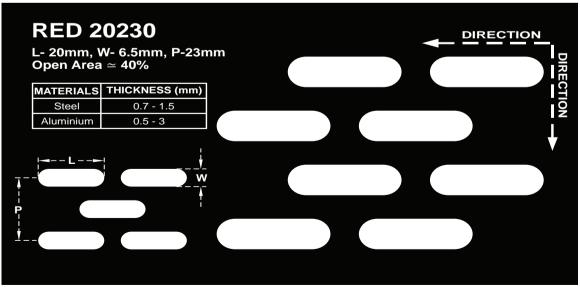
SURFACE DESIGN PATTERNS 6010 PERFORATION PATTERNS



⁺ We offer a wide range of custom designed perforation patterns. For any requirements & for more selection of Perforation Patterns, you can send your requirements to contactus@rammetal.com or do your own selection from www.schiavetti.it



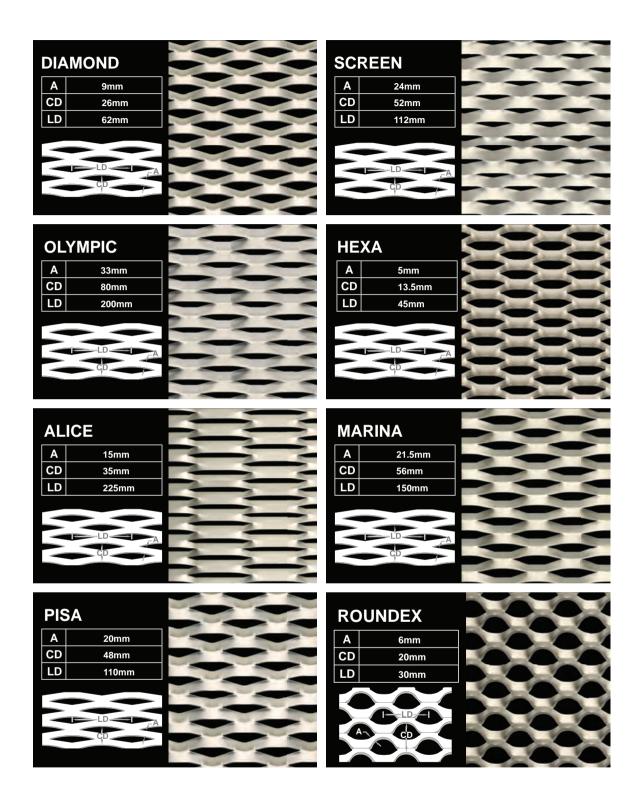




⁺ We offer a wide range of custom designed perforation patterns. For any requirements & for more selection of Perforation Patterns, you can send your requirements to contactus@rammetal.com or do your own selection from www.schiavetti.it



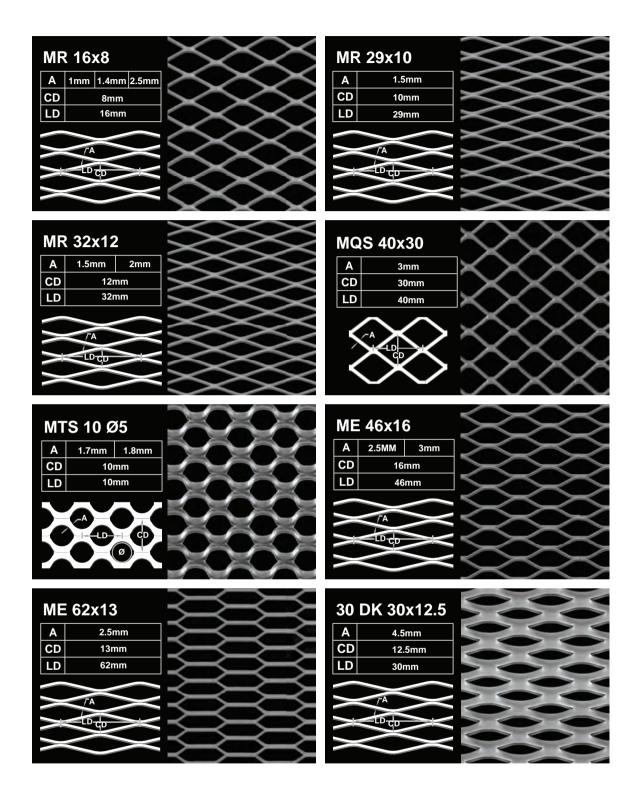
WALL CLADDINGS



⁺ We offer a wide range of expanded metal mesh patterns. For any requirements & for more selection of Patterns, you can send your requirements to **contactus@rammetal.com** or do your own selection from **www.rgs.it**



FALSE CEILINGS



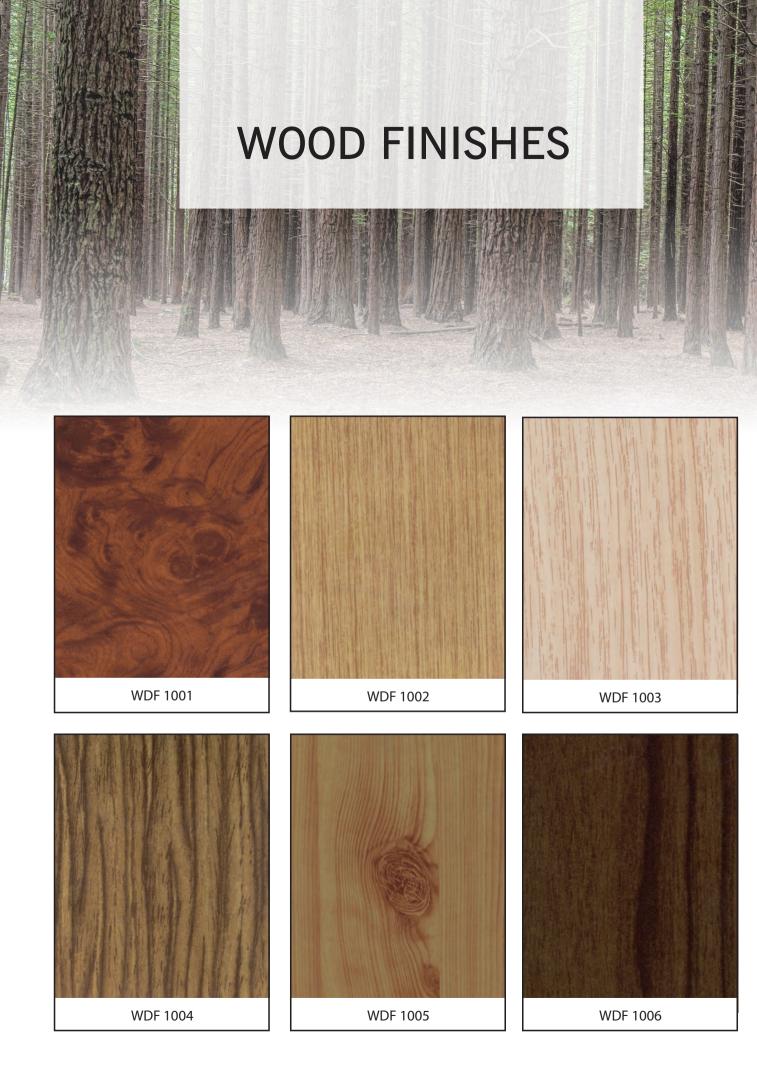
⁺ We offer a wide range of expanded metal mesh patterns. For any requirements & for more selection of Patterns, you can send your requirements to **contactus@rammetal.com** or do your own selection from **www.rgs.it**

RAL COLORS





This color card is to be used as an indication only.





This color card is to be used as an indication only.

ARCHITECTURAL FINISHES

SPECIAL FINISHES

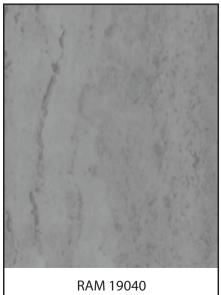












STAINLESS STEEL FINISHES



This color card is to be used as an indication only.





ACOUSTICS

Tested as per BS EN ISO 354: 2003 for sound absorption, noise reduction and sound attenua-

NRC achieved with Acoustic Black fleece - NRC 0.75

NRC achieved with Acoustic Black Fleece and Rockwool Insulation- NRC 1.00

Tested as per ASTM E1414 – 11a for Airborne Sound Attenuation as per ISO 10848-2.

CAC can achieved up to - 48 dB

Perforated & Sound Attenuation cover



WIND RESISTANCE

Tested as per ASTM E330-02

Complies with CWCT Sec 1,12:2005

Wind Resistance - Serviceability & Safety (3600 Pa)

Air Permeability

Complies with CWCT Sec 5:2005 Air Leakage (Test pressure +/- 600 Pa)



ANTI BACTERIAL COATING

Tested as per JIS Z 2801: 2000, which inhibits the growth of bacteria on the applied surface.



LIGHT REFLECTANCE (LR)

Achieved by the metal ceiling/cladding is LR – 0.85-0.96 tested as per ASTM E 1477.



WATER RESISTANCE

Complies with CWCT Sec 6,7:2005 Water Penetration -Static Method & Dynamic Aero Engine Test (Test pressure 600 Pa)



IGNITION PERFORMANCE FOR PLASTICS

Complies with ASTM D1929-16 Standard Test Method for Determining Ignition Temperature of **Plastics**

- * Flash Ignition Temprature 458 °C
- * Self-Ignition Temprature 458 °C



FIRE PERFORMANCE

Surface Spread of flame Class 1 tested as per BS 476: Part 7: 1997

"Non-Combustible" Material tested as per BS 476: Part4: 1970

Flame Spread and Smoke Development Index tested as per ASTM E84 (Class 1 or A)

Complies with UNE-EN 13501-1:2007+A1:2010 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests (CLASS A2-S1, d0)

Complies with NFPA 285-2012 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Compo-



FIRE RESISTANCE

Fire Rated tested as per BS476: Part 23: 1987 Fire tests on building materials and structures. Methods for determination of the contribution of components to the fire resistance of a structure



SECURITY

Complies with ASTM F2322 standards for physical assault on vertical fixed barries for detention and correctional facilities



SOFT BODY IMPACT TEST

Tested as per CWCT 75/76 - Impact performance of building envelopes.

Soft body test energy exposure category B

Serviceability - Class 1 (Impact energy 120 J)

Safety performance - Negligible risk (Impact energy 500 J)



ANTI DRUMMING

High performance sound deadening and reduced vibrations (resonance)



