

BRUCHA®



PANELS
THAT
CONNECT.

roof

PIR+ / iQTec
nonhalogen foam technology®
fire protection



ENVIRONMENTALLY CERTIFIED PRODUCTION

We all rely on the efficient use of energy.

This requires work processes to be as sustainable as possible.



BRUCHA

always
one step ahead

We have always been a pioneer in the implementation of efficient energy-saving measures. Numerous actions and projects have been realized in recent years to significantly improve our energy consumption. The implementation of further measures leads to continuous improvements of our production processes, our products and most importantly to new product developments.

Bringing proof that we are a responsible manufacturer, we are certified according to the environmental management system **ISO 14001: since 2013**. All BRUCHA panels with PIR+ and mineral wool core are certified according to the standard for responsible sourcing **BES 6001** - assessment score - **Very Good**.



PANELS THAT CONNECT.

BRUCHA panel

roof



assessment score

Very Good



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PIR rigid foam

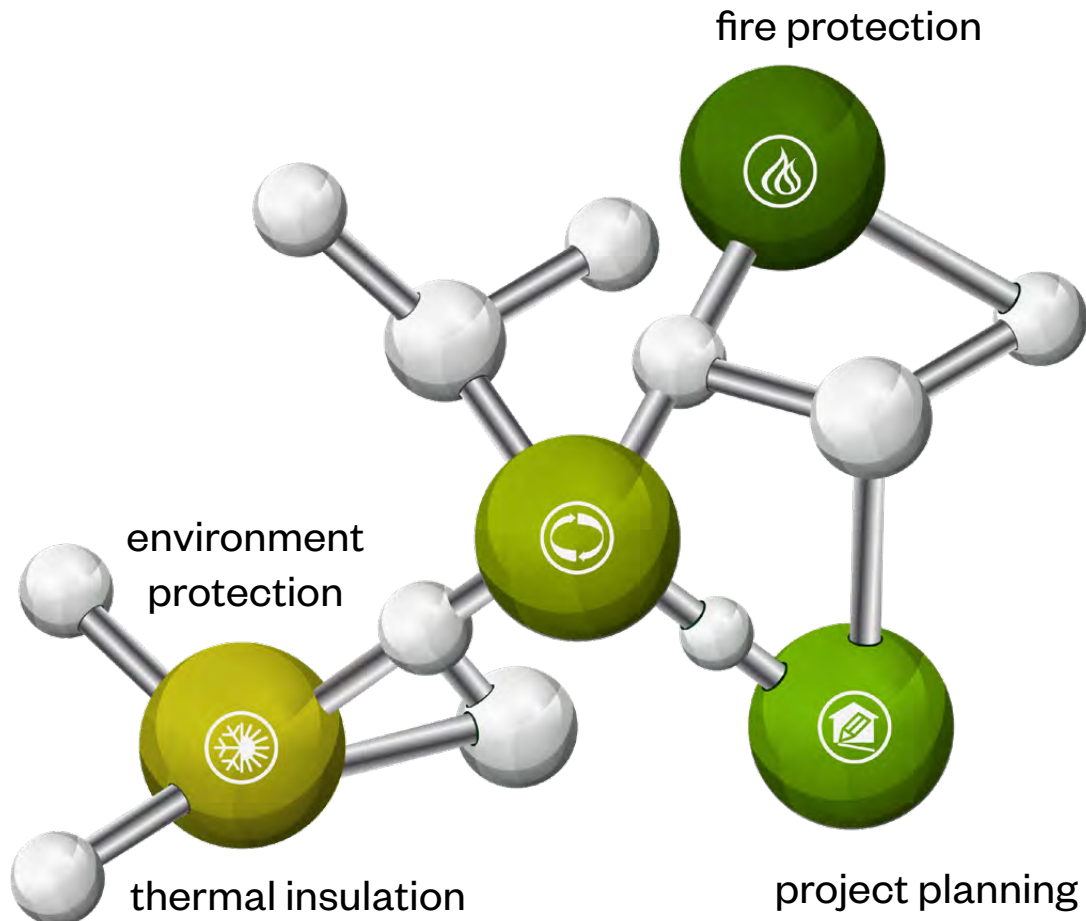
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BRUCHA panel

insulation core



fire behavior
acc. EN 13501-1

Euroclass Bs1d0
flame protection

excellent
energy efficiency

low
thermal conductivity

VOC emission
class A+

outstanding
LCA

low
operating weight

high stability,
thin construction,
floor space gain

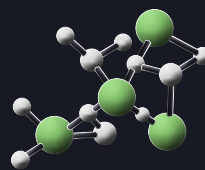
BRUCHA®



**PANELS
THAT
CONNECT.**

PIR+
nonhalogen

iQTec
foam technology®



BRUCHA panel roof



BRUCHA panel DP roof

DESIGN AND SURFACES Standard - coil-coated, hot-dip galvanised steel sheet

EXTERIOR

- Exposed side 25 µm polyester coating with a PVC protective film (not UV-resistant - protect from direct sunlight).
The film must be removed before installation or immediately afterwards.
- profile: Trapezoidal profile, 1.65" / 42 mm (according to diagram)
- crown distance: 13.12" / 333.3 mm
- metal gauge: 24 ga / 0.6 mm (smaller metal gauge on request)

INTERIOR

- Exposed side has 25 µm polyester coating without protective PVC film (if required, please specify with order).
- profile 1 = standard (profile 2 and 3 on request)
- metal gauge: 26 ga / 0.5 mm (smaller metal gauge on request)

INSULATION CORE

- **nonhalogen** PIR/polyurethane rigid foam, approx. 96 % closed cells, continuously foamed
- absolutely no chlorofluorocarbons or halogenated chlorofluorocarbons - pentane foam process
- low thermal conductivity
- securely attached to the steel sheet
- density approx. 2.50 lb/ft³ or 40 kg/m³



STANDARD COLORS

in accordance with BASIC color range

PANEL CONNECTION

- External, by overlapping of the corrugations, whereby the non-foamed sheet of a panel is placed over the corresponding section of the next panel.
- On the underside, by special shaping, whereby the complementary profile to the corrugation of one roof panel overlaps the corrugation of the second panel, thus achieving a tight connection.
- Unique **TRIPLE SEALING SYSTEM** (as per diagram) offers optimal condensate protection.
- capillary break (refer drawing)

TENDER TEXT

download from: brucha.com

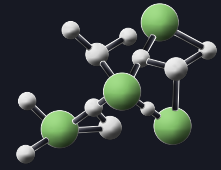
EXTERNAL MONITORING National and international tests and quality standards. We will send the certificates on request.



BRUCHA panel DP roof

PIR+
nonhalogen

iQTec
foam technology®



Minimum roof pitch 3° (5.2 %) without transverse joint and penetration.

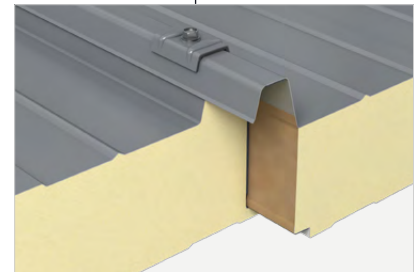
BRUCHA panel DP with PIR/polyurethane core can be combined with BRUCHA panel DP-F with mineral wool core.

TRAPEZOID PROFILE exterior

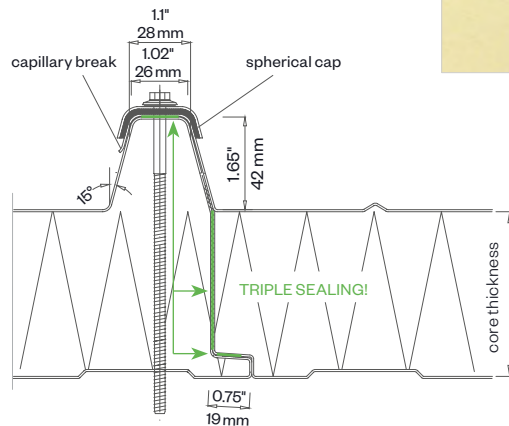
close-up



symbol image - DP



DETAIL/joint geometry



butt joint:
0.08" = 0.08" tolerance
2 mm ± 2 mm tolerance

PANEL TYPE	DP 72	DP 82	DP 92**	DP 102	DP 122	DP 142	DP 162	DP 182	DP 202
core thickness in ≈ inch in mm	1" 30	1.5" 40	2" 50	2.5" 60	3" 80	4" 100	4.5" 120	5.5" 140	6.5" 160
PIR+ non-halogen R-value thermal performance at 75°F	10	13	16	19	25	31	37	43	49
iQTec on request R-value thermal performance at 75°F	10.5	13.5	17	20	26	32.5	39	45	51.5
weight in lb/ft ² in kg/m ²	2.01 9.80	2.09 10.22	2.18 10.63	2.26 11.05	2.44 11.89	2.61 12.72	2.78 13.55	2.95 14.39	3.12 15.22

**DP 92 on request

MANUFACTURING LENGTHS

39' 2" or 11.95 m (44' 3 1/2" or 13.50 m)

R-VALUE

≈ 7.50 per inch @75°F mean temperature
≈ 8.25 per inch @35°F mean temperature

SPAN WIDTH TABLES

according static tables

PERMANENT TEMPERATURE RESISTANCE

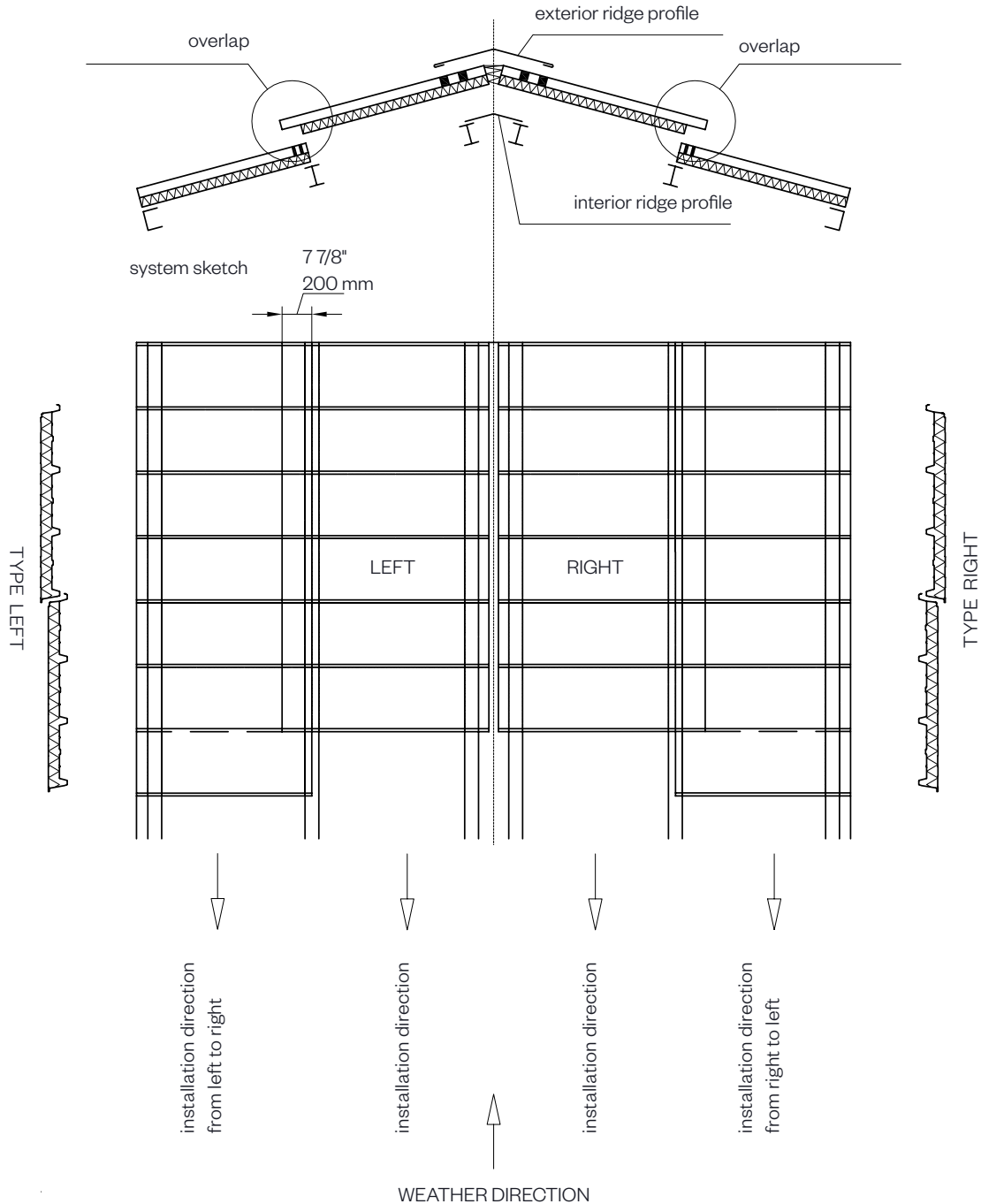
176°F/80°C

BRUCHA®

BRUCHA panel DP roof

ROOF ELEMENTS WITH TRANSVERSE JOINT AND OVERLAP

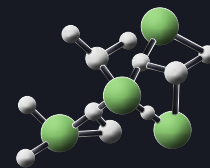
With transverse joints, penetrations or roof lights - minimum pitch 5° (8.6 %)



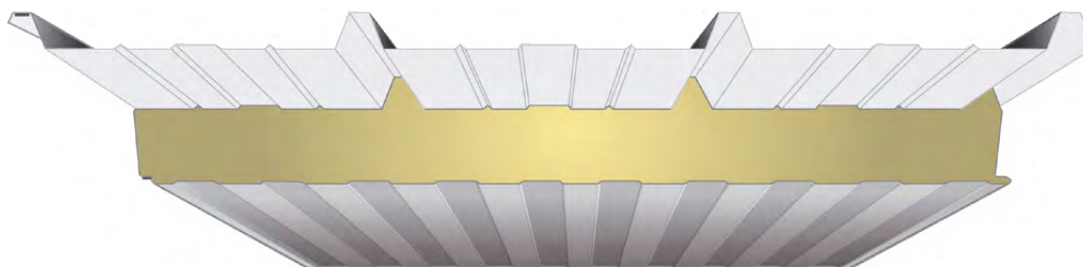
BRUCHA panel DP roof

PIR+
nonhalogen

iQTec
foam technology®



SHEET METAL SEPARATION CUT – NOTCHES



A notch in the eave area is recommended in order to rule out any possibility of the sheet metal shell lifting up from the insulation body (available at a surcharge).

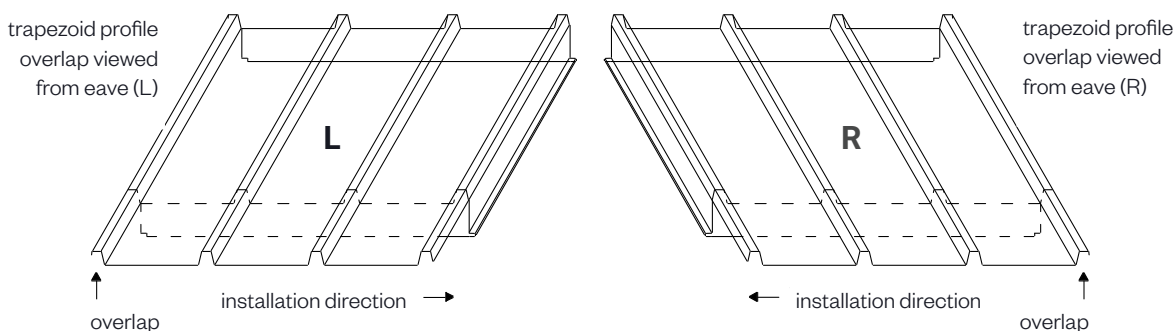
Similarly, a drip cap should be fitted in the eave area so as to prevent a capillary effect (only possible on the construction site). These measures prevent the formation of corrosion between the sheet metal shell and the insulation.

Please state when ordering	Notch length
NOTCH IN EAVE	≈ 2.5" or 60 mm (Standard)
NOTCH FOR OVERLAP	≈ 8" or 200 mm (Standard)

Possible notch lengths 2.5, 3, 4, 4.5, 6, 8, 10 and 12 ≈ inch
60, 80, 100, 120, 150, 200, 250 and 300 mm

TRAPEZOID METAL SHEET 42/333 suitable for DP and DP-F

NOTCH METHOD (viewed from eave):



BRUCHA milestones

- Inaugurated in 1948 in Michelhausen, Austria
- A proud Austrian family business, thriving across four generations
- Pioneered discontinuous sandwich panel production in 1978
- Embarked on an internationalization journey in 1984
- Achieved four continuous production lines by 1998
- Boasts a production area exceeding 1 million square feet
- Employs a dedicated workforce of 800+
- Subsidiaries and partners spanning all continents



BRUCHA Corp. / Denver, CO

subsidiary company founded 2018

- Producer of the proven BRUCHA panel for facade and cold room construction
- Ongoing product development with regard to quality and environmental protection
- Use of the latest production equipment
- State of the art manufacturing
- ISO 14001 since 2019
- Brucha green building - we fulfill all current environmental certifications

PROJECTS

- Industrial and food processing plants
- Stainless steel and FRP panels
- Hinged and sliding doors
- Ram protection systems
- Clean rooms and special construction
- CA and OxyReduct warehouses
- High bay warehouse construction
- Worldwide supervisor - assembly
- Engineering



Zero Swiss Food Incorporated **ESFI FOOD PROCESSING PLANT**
is a LEED®-registered project submitted at Silver level of certification.

On-Site Renewable Energy
Photovoltaics will offset an estimated 20% of total Annual Energy demand.

Water Use Reduction
Efficient Plumbing Fixture and Sewage Treatment Plant will save up to 70% of Annual Potable Water Consumption.

Non-Toxic Finishes
Adhesives, sealants, paints and coatings with Low Volatile Organic Compound content were used in the interior of the building.

BREEM® EXCELLENT

"Bream Excellent design certificate" for its sustainable construction



1960



2023



PRODUCTS

- BRUCHA panels facade / wall and roof with PIR+ or mineral wool insulation core for fire protection
- Coldroom & freezer walk-in boxes
- Hinged and sliding doors for chiller-, freezer- and froster rooms
- High bay / CA storage / clean rooms
- Flashings & accessories

ENVIRONMENTAL POLICY

some of our certificates

- **ISO 14001:2015** – since 2019 environmental management
- **BES 6001** – **Very Good** responsible procurement of building products
- **ISO 9001:2015**
- Cradle-to-Cradle – circular economy
- **Non Halogen PIR+ Foam** = Non toxic smoke
- 30 % recycled content in our PIR+ Foam
- Usage of **greentec steel** – reduced carbon footprint
- Listing in the DGNB Navigator
- Factsheets for LEED v4 and BREEAM
- EPDs product declarations for all BRUCHA panels



BRUCHA
green point

DGNB Platin ÖGNI award for the ecological performance of the building

CERTIFICATIONS



details about it on our website



brucha.com/en/downloads-certificates

BRUCHA panel DP

€CO-roof

DESIGN AND SURFACES Standard - coil-coated, hot-dip galvanised steel sheet

EXTERIOR

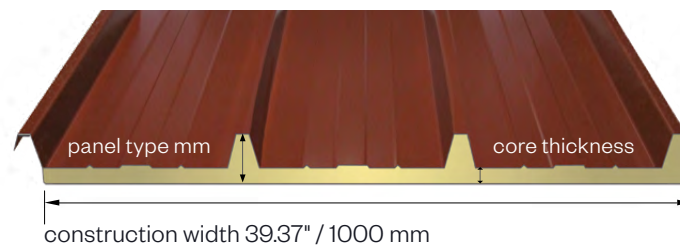
- Exposed side 25 µm polyester coating with a PVC protective film (not UV-resistant - protect from direct sunlight).
The film must be removed before installation or immediately afterwards.
- profile: Trapezoidal profile, 1.65" / 42 mm (according to diagram)
- crown distance: 13.12" / 333.3 mm
- metal gauge: 24 ga / 0.6 mm (smaller metal gauge on request)

INTERIOR

- Aluminium lining – Stucco white, layer thickness 80 µm, resistant to organic acids.
- Impairment of the visual impact is possible due to the thin interior shell.
- For areas where the view from below must satisfy the highest visual requirements, we recommend the BRUCHA panel roof – DP with sheet metal interior shell.

INSULATION CORE

- **nonhalogen** PIR/polyurethane rigid foam, approx. 96 % closed cells, continuously foamed
- absolutely no chlorofluorocarbons or halogenated chlorofluorocarbons – pentane foam process
- low thermal conductivity
- securely attached to the steel sheet
- density approx. 2.50 lb/ft³ or 40 kg/m³



STANDARD COLORS

in accordance with BASIC color range, identical to BRUCHA panel roof DP

PANEL CONNECTION

- On the exterior by overlapping of beads, whereby the unfoamed sheet metal part of a panel is laid on the corresponding counterpart of the following panel (including SEALS!).
- capillary break (see drawing)

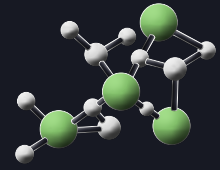
- for agricultural structures
- as protection against the formation of condensation
- at least 0.59" or 15 mm insulation
- reasonably priced alternative to BRUCHA panel PIR+/iQTec roof - DP

BRUCHA panel DP

€CO-roof

PIR+
nonhalogen

iQTec
foam technology®



Minimum roof pitch 3° (5.2%)

TRAPEZOID PROFILE exterior

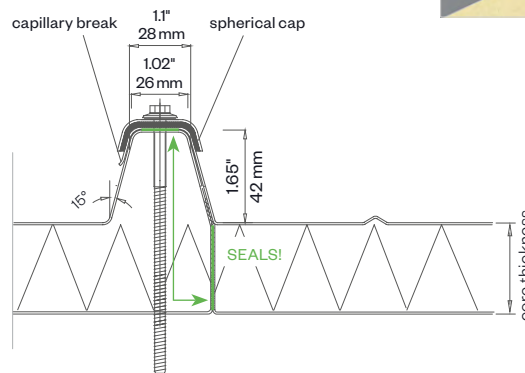
close-up



symbol image - €CO roof



DETAIL/joint geometry



butt joint:
0.08" = 0.08" tolerance
2 mm ± 2 mm tolerance

PANEL TYPE	€CO 57	€CO 72	€CO 102
core thickness in ≈ inch in mm	0.5" 15	1" 30	2.5** 60*
PIR+ non-halogen R-value thermal performance at 75°F	5.5	10	19
weight in lb/ft ² in kg/m ²	1.12 5.45	1.24 6.07	1.50 7.32

*on request

MANUFACTURING LENGTHS

39' 2" or 11.95 m (44' 3 1/2" or 13.50 m)

R-VALUE

≈ 7.50 per inch @75°F mean temperature
≈ 8.25 per inch @35°F mean temperature

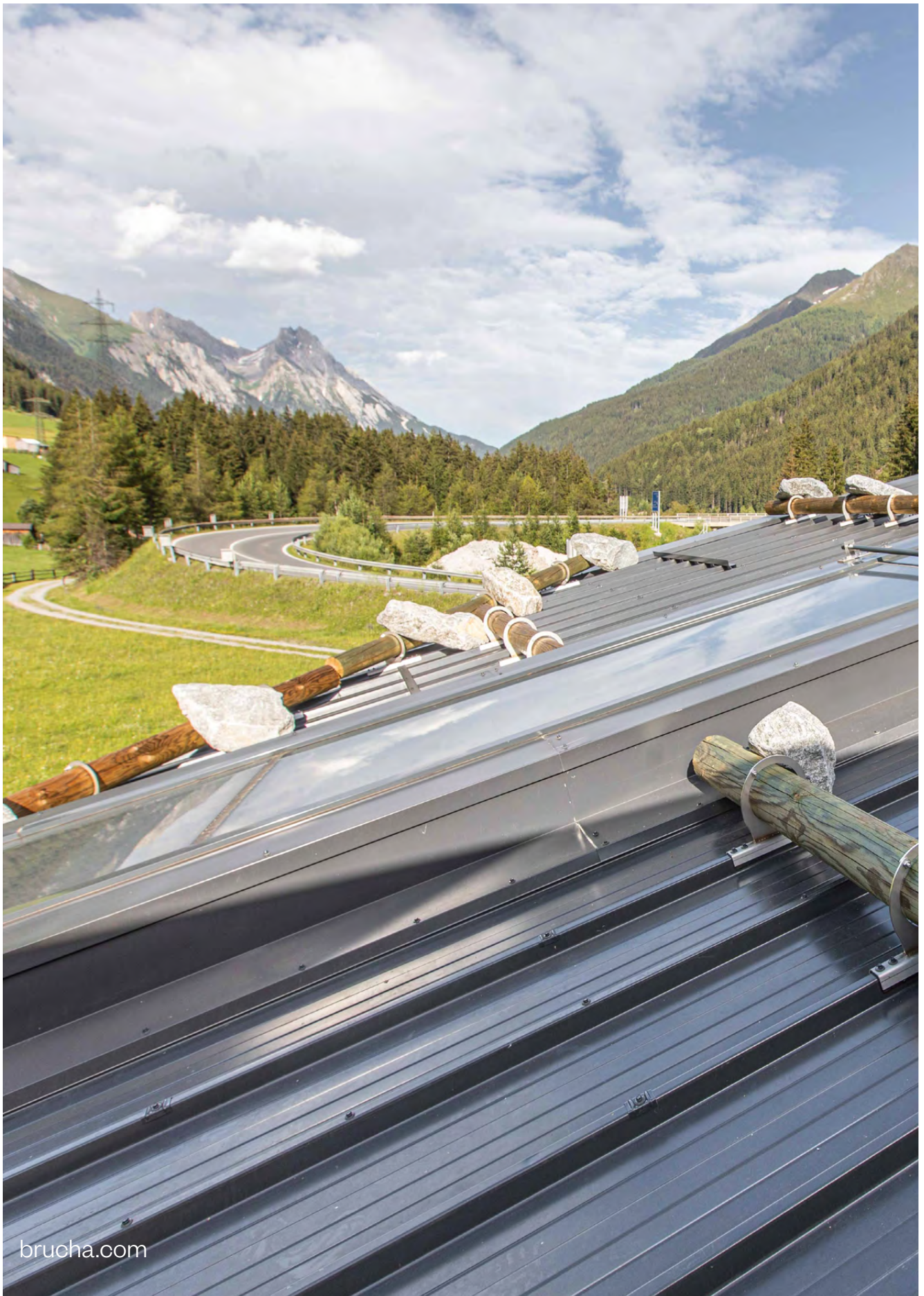
SPAN WIDTH TABLES

according static tables

PERMANENT TEMPERATURE RESISTANCE

176°F/80°C

BRUCHA®



BRUCHA®

**PANELS
THAT
CONNECT.**



fire protection

BRUCHA panel roof





fire protection

BRUCHA panel DP-F

roof non-combustible

DESIGN AND SURFACES Standard - coil-coated, hot-dip galvanised steel sheet

EXTERIOR

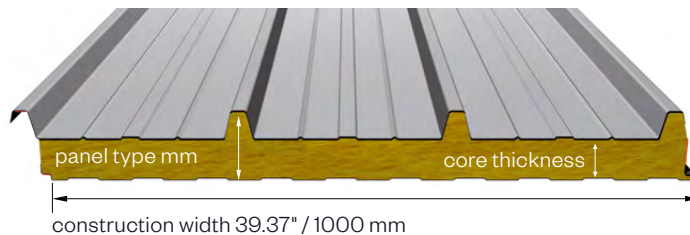
- Exposed side 25 µm polyester coating with a PVC protective film (not UV-resistant - protect from direct sunlight).
The film must be removed before installation or immediately afterwards.
- profile: trapezoidal profile, 1.65" / 42 mm (according to diagram)
- crown distance: 13.12" / 333.3 mm
- metal gauge: 24 ga / 0.6 mm (smaller metal gauge on request)

INTERIOR

- Exposed side has 25 µm polyester coating without protective PVC film (if required please specify with order).
- profile 1 = standard (profile 2 and 3 on request)
- metal gauge: 24 ga / 0.6 mm (smaller metal gauge on request)

INSULATION CORE

- structural, web-oriented mineral fibre wool
- securely attached to the sheet steel shell
- density approx. 7.50 lb/ft³ or 120 kg/m³, 8.75 lb/ft³ or 140 kg/m³ available on request



STANDARD COLORS

in accordance with BASIC color range

PANEL CONNECTION

- External, by overlapping of the profiles, whereby the non-foamed sheet of a panel is placed over the corresponding section of the next panel.
- On the underside, by special shaping, whereby the complementary profile to the profile of one roof panel overlaps the profile of the second panel. The included seals offer additional reliability, achieving a reliably tight connection.
- capillary break (acc. drawing)

TENDER TEXT

download from: brucha.com

EXTERNAL MONITORING

National and international tests and quality standards. We will send the certificates on request.

VAPOUR DIFFUSION

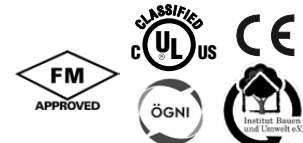
Determined by climatic conditions inside building. Panels must be installed vapour tight.

PANEL INSTALLATION

When working with our products, please follow our installation guidelines at brucha.com/downloads



brucha.com



BRUCHA panel DP-F

roof non-combustible



fire protection

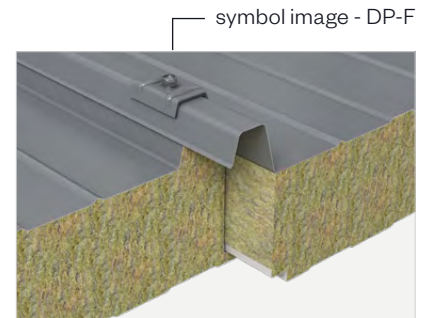
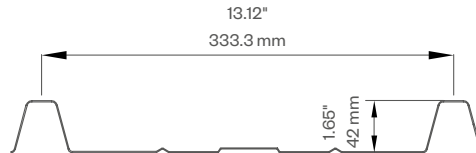
Minimum roof pitch 3° (5.2 %) without transverse joint and penetration.

BRUCHA panel DP-F with mineral wool core

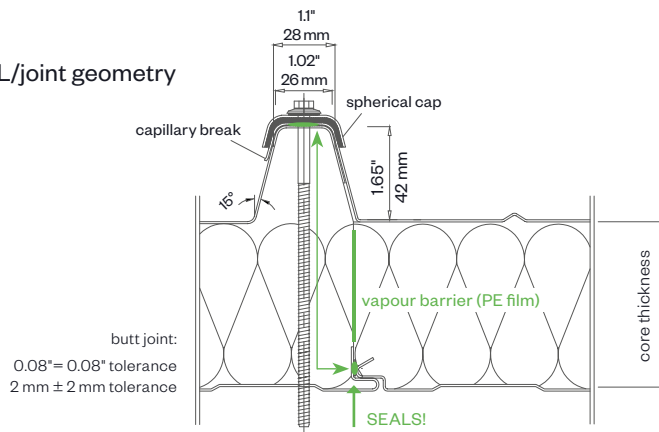
can be combined with BRUCHA panel DP with polyurethane core.

TRAPEZOID PROFILE

exterior - close-up



DETAIL/joint geometry



A notch in the eave area is required in order to rule out any possibility of the sheet metal shell lifting up from the insulation body (available at a surcharge). Similarly, a drip cap should be fitted in the eave area so as to prevent a capillary effect (only possible on the construction site).

These measures prevent the formation of corrosion between the sheet metal shell and the insulation. We recommend to cover the core in the end with (part No. Z 13b) cog sheet.

PANEL TYPE	DP-F 102	DP-F 122	DP-F 142	DP-F 162	DP-F 182	DP-F 192	DP-F 202	DP-F 222	DP-F 242
core thickness in ≈ inch	2.5"	3"	4"	4.5"	5.5"	6"	6.5"	7"	8"
in mm	60	80	100	120	140	150	160	180	200
R-value thermal performance	9.5	12	15	17.5	20	22	23	26	29
weight in lb/ft ²	3.44	3.95	4.47	4.98	5.49	5.75	6.01	6.52	7.03
in kg/m ²	16.80	19.31	21.81	24.31	26.81	28.07	29.32	31.82	34.32
fire resistance* ANSI/UL 263, CAN/ULC-S101	---	---	EI 60	EI 60	EI 60	EI 120	EI 120	EI 120	EI 120

*Certificates must be checked for the usage case in question (horizontal/vertical/span width etc.).

MANUFACTURING LENGTHS

39' 2" or 11.95 m (44' 3 1/2" or 13.50 m)

R-VALUE

≈ 3.80 per inch @75°F mean temperature

SPAN WIDTH TABLES

according static tables

PERMANENT TEMPERATURE RESISTANCE

176°F/80°C





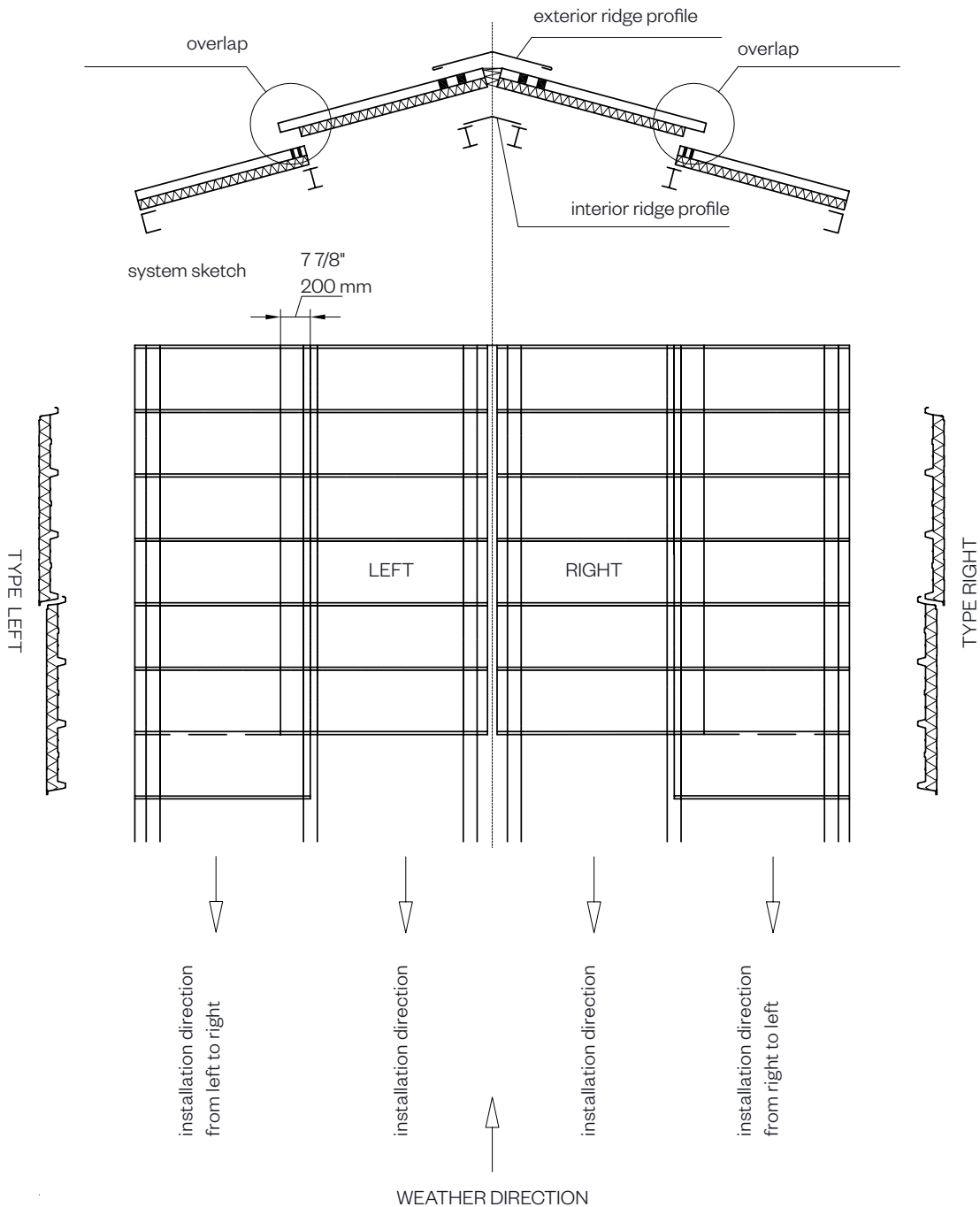
fire protection

BRUCHA panel DP-F

roof non-combustible

ROOF ELEMENTS WITH TRANSVERSE JOINT AND OVERLAP

With transverse joints, penetrations or roof lights – minimum pitch 5° (8.6 %)



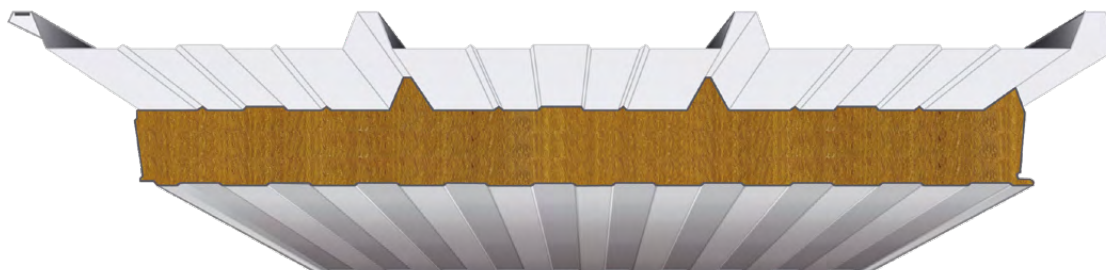
BRUCHA panel DP-F

roof non-combustible



fire protection

SHEET METAL SEPARATION CUT – NOTCHES



A notch in the eave area is recommended in order to rule out any possibility of the sheet metal shell lifting up from the insulation body (available at a surcharge). Similarly, a drip cap should be fitted in the eave area so as to prevent a capillary effect (only possible on the construction site).

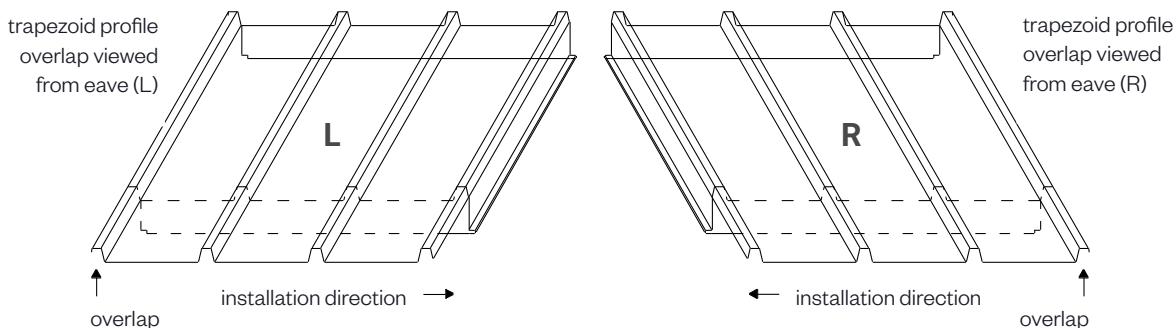
These measures prevent the formation of corrosion between the sheet metal shell and the insulation.

Please state when ordering	Notch length
NOTCH IN EAVE	≈ 2.5" or 60 mm (Standard)
NOTCH FOR OVERLAP	≈ 8" or 200 mm (Standard)

Possible notch lengths 2.5, 3, 4, 4.5, 6, 8, 10, and 12 ≈ inch
60, 80, 100, 120, 150, 200, 250 and 300 mm

TRAPEZOID METAL SHEET 42/333 suitable for DP and DP-F

NOTCH METHOD (viewed from eave):



BRUCHA®

PANELS THAT CONNECT.

Contact:

BRUCHA Corp.
4949 S Syracuse Street, Suite 550
Denver, CO 80237

T: 866.BRUCHA1
M: infousa@brucha.com
bruchaamerica.com

PRODUCTS

- > BRUCHA IMP panels
- > Cold & freezer rooms
- > High bay warehouses
- > Hinged and sliding doors
- > Accessories
- > CA storage/Clean rooms

SERVICES

- > Assemblies
for special & cold room
construction
- > BRUCHA
Food Engineering
Design, Layout, Planning, BOM

Headquarters/production

BRUCHA GesmbH
Rusterstraße 33
AT-3451 Michelhausen
Austria - Europe

us_10/2023 - All information is considered to be
subject to errors in composition or printing errors.

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