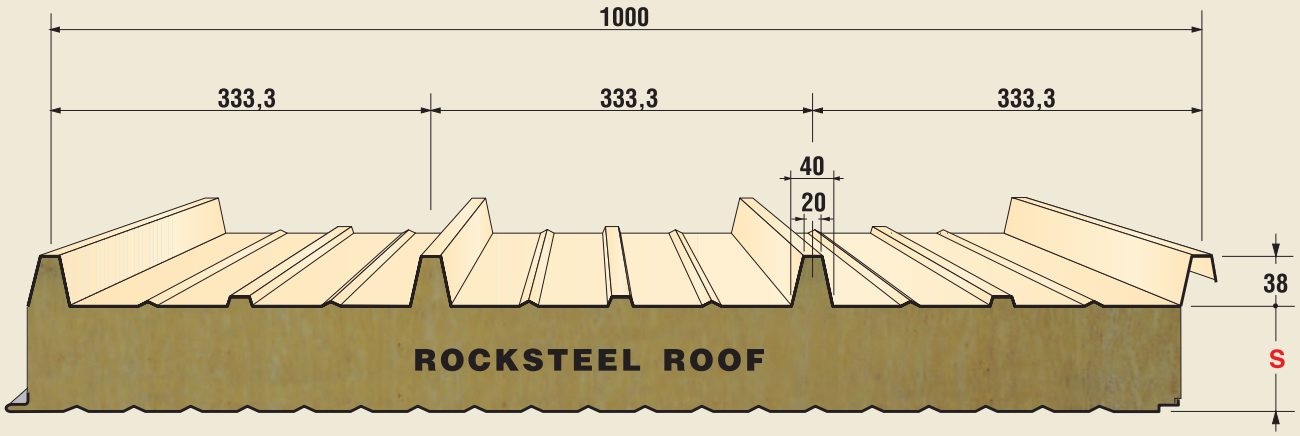
# ROCKSTEEL ROOF

**Profiled roof system, p ≥ 7% insulated with a Rockwool core, with fire reaction certification.**

Self-supporting panel system, insulated with Rockwool for roof and wall applications.
The **ROCKSTEEL® ROOF** panel, is manufactured in accordance with a system patented by Metecno, and consists of a profiled external steel facing, an internal micro-ribbed liner, with an insulation core of high density orientated Rockwool, arranged perpendicular to the plane of the panel and positioned in strips, laid longitudinally with off-set joints and transversally compacted, in such a way as to completely fill the void between the two metal facings, including the profiled trapezoidals.




## EXTERNAL AND INTERNAL SHEET

The following materials can be used:

**– Prepainted galvanised steel S 280 GD**
**– Stainless steel AISI 304 -** or **AISI 430**
Nominal thickness: 0.5 - 0.6 - 0.8 mm
Paint: METCOLOR System

## INSULATION

Rockwool, density: 75 kg./m³
Thickness: 50 - 80 - 100 - 120 mm.

## REACTION TO FIRE

Reaction to fire is the degree in which a material resists combustion. With regard to this, materials are assigned a class (0 through 5): the higher the class, the higher the degree of combustion.
The **ROCKSTEEL® ROOF** panels, 50 - 80 - 100 - 120 mm thick, tested at the Istituto Giordano S.p.A., pursuant to the Ministerial Decree of 26/6/84, **were classified 0/1 for reaction to fire in the roof position.**
Since the panel consists of two steel sheets with a layer of rock wool in between, the class 0 refers to the external surface and the class 1 to the insulation.

## TABLE OF SAFE SPANS

Minimum values with steel sheets, thickness 0.5 + 0.5 mm. The spans *l* in metres, as a function of a uniformly distributed load **p** (daN/m²), have been obtained from tests carried out in Metecno laboratories and calculated to provide a deflection limit: f ≤ *l*/200 of the span and a minimum safety coefficient that complies with the UEAtc standards for insulated panels, which have been established and are implemented by primary European Certifying Organizations.

| S mm | K Kcal/m²h°C | K Watt/m²°C | Panel weight kg/m² 0,5+0,5 | p = daN/m² | 80 | 100 | 120 | 150 | 200 | 250 | 300 | 80 | 100 | 120 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | p p p | | | | | | | p | | | | | | |
| | | | | | △ *l* △ *l* △ *l* △ | | | | | | | △ *l* △ | | | | | | |
| 50 | 0,59 | 0,68 | 13,7 | *l* = | 3,52 | 2,98 | 2,59 | 2,16 | 1,71 | 1,41 | 1,18 | 3,06 | 2,59 | 2,25 | 1,88 | 1,49 | 1,23 | 1,03 |
| 80 | 0,40 | 0,46 | 15,9 | *l* = | 4,76 | 4,26 | 3,70 | 3,02 | 2,29 | 1,84 | 1,54 | 4,14 | 3,70 | 3,22 | 2,63 | 1,99 | 1,60 | 1,34 |
| 100 | 0,32 | 0,38 | 17,4 | *l* = | 5,45 | 4,69 | 3,94 | 3,20 | 2,43 | 1,96 | 1,63 | 4,74 | 4,08 | 3,43 | 2,78 | 2,11 | 1,70 | 1,42 |
| 120 | 0,28 | 0,32 | 18,9 | *l* = | 6,13 | 5,12 | 4,29 | 3,48 | 2,65 | 2,13 | 1,78 | 5,33 | 4,45 | 3,73 | 3,03 | 2,30 | 1,85 | 1,55 |