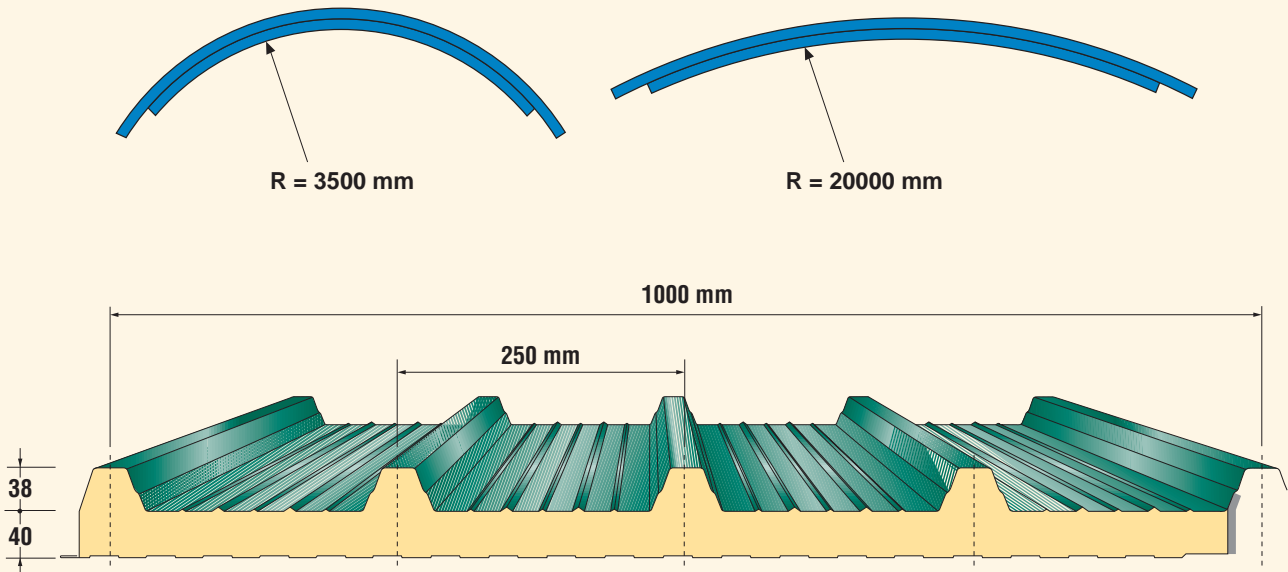


Polyurethane insulated monolithic metal panel with curved longitudinal axis designed as a roofing system for residential and industrial buildings. The bending radius varies from 3500 mm to 20000 mm.



Maximum length of the external sheet: 6 m.  
 Variable bending radius: 3.5 to 20 m.  
 Useful width: 1000 m.

**External metal surfaces**

- Pre-painted galvanized steel, 6/10 mm
- Natural or pre-painted aluminum, 7/10 mm
- Copper, 5/10 mm

**Internal metal surfaces**

- Pre-painted galvanized steel, 4/10 mm
- Natural or pre-painted aluminum, 7/10 mm



Polyurethane insulation thickness (excluding the corrugation): 40 mm  
 Average density of the polyurethane foam: 40 Kg/m<sup>3</sup>  
 Thermal insulation coefficient: **K** = 0.37 Kcal/m<sup>2</sup> h °C = 0.43 W/m<sup>2</sup> °C

**TABLE OF SAFE SPANS (in daN/m<sup>2</sup>)**

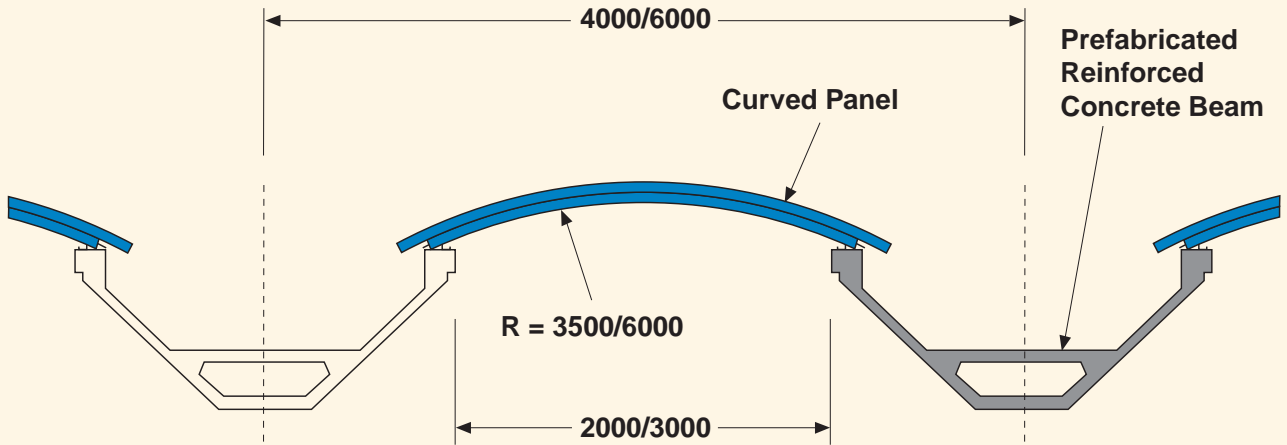
Metal roofing considered for the table here below: external steel 6/10 and internal steel 4/10. For other types of roofing, ask for technical data.

R mm	 l = span in mm.					 l = span in mm.		
	1000	2000	3000	4000	5000	1000	2000	3000
3000	1150	837	593	424	292	1453	1057	749
6000	679	480	312	222	161	858	606	394
9000	590	385	216	149	107	745	486	273
12000	558	356	170	112	80	705	450	215
16000	540	304	139	85	58	682	384	176
20000	532	257	124	70	46	672	325	157



## INDUSTRIAL BUILDINGS WITH VAULTED ROOFING

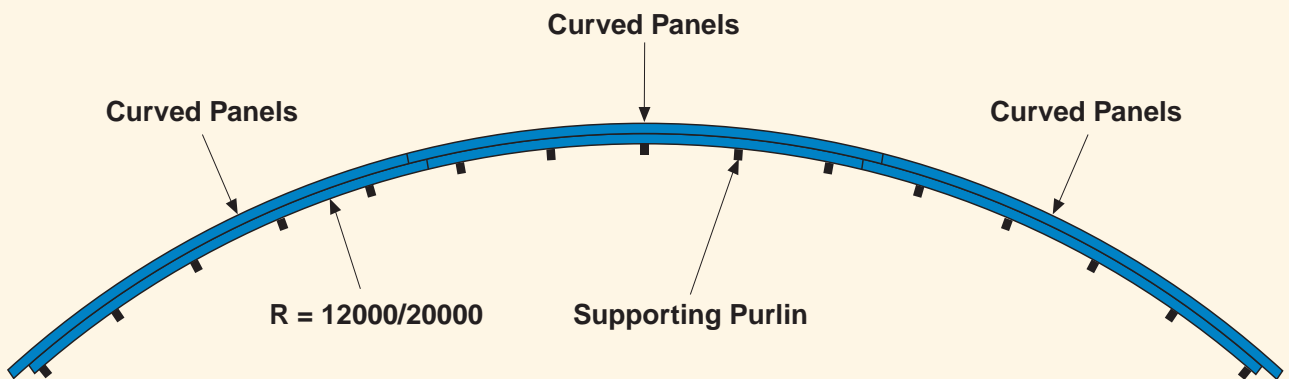
In these buildings, the roofing is formed by prefabricated self-supporting reinforced concrete or pre-compressed reinforced concrete beams, which are normally placed at a distance between centers of 5/6 m. The roofing elements are mounted perpendicularly to the supporting beams. The free span between the supporting beams is usually 2/3 m. The panel ends are usually fixed to the structures with specific steel brackets.



These types of roofing are usually formed by curved corrugated sheets or asbestos lumbers. Our curved panels are an alternative solution, featuring strongly desirable decorative and structural characteristics and, above all, a considerable thermal insulation.

## INDUSTRIAL BUILDINGS WITH CURVED ROOFING

The roofing elements of these buildings are usually formed by asbestos lumbers of variable lengths (1.22 to 2.44) and bending radiuses (6 to 15 m). Our solution featuring the monolithic panel eliminates all ecological problems, works on the same bending radius - suitably increased - as the trusses, distributes the load on several spans, and provides an excellent thermal insulation. The panel is fixed to the purlin by means of the standard assembly set including screws and suitable cap nuts.



It is important to point out that, in this type of roofing, panels should be joined in the center of the supporting purlin, as indicated in the illustration to the right.

