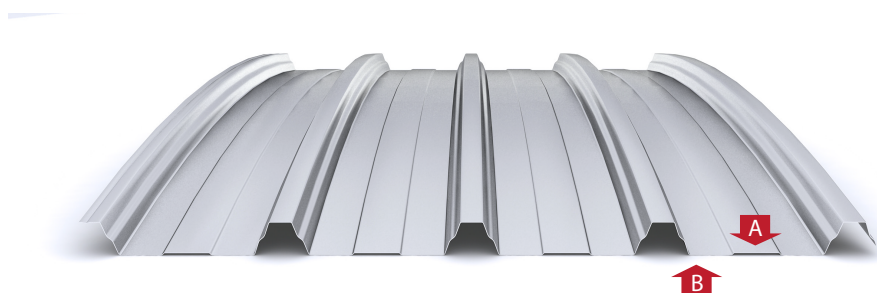


Product



Perforation



Overlap

Working Length: 980 mm
Height Profile: 44 mm

Description

INCO 44.4 metallic roof for use as free-standing roof for spans of up to 8 metres. A light roof which eliminates the need for a support structure. Quicker assembly, reduced costs, structural savings and improved aesthetics.

This profile is available galvanized and in different primed colours. This profile can be curved. Perforated steel can be used for applications requiring better acoustics.

Applications

- Industrial: hangars, plants, water tanks.
- Agricultural: stables, sheds.
- Comercial: open spaces, sport, walled.
- Public: schools, gymnasium, pavilions.

Complementary Articles

- INCOPOL 44.4 (Skylight of Polycarbonate)
- Tight Joint INCO 44.4 Upper/ Lower
- Trimming

Related Documents

- General Catalogue
- Technical Sheet
- Technical Dossier
- Declaration of Performance (DDP / DOP)

Material

Steel	EN 10346
Organic Coating	EN 10169
Dimensional Tolerance	EN 10346
Reaction to Fire	EN 14782

Finishing

- Galvanized
- Standard Organic Coating / High Organic Coating
- Specialty Materials: Corten Steel and Magnelis
- Perforated for Acoustic Solutions

Manufacturing Conditions

Manufacturing Length	Min. / Max. 2.200 / 8.000 mm
Thickness Range	0,60 0,70 0,75 0,80 1,00 1,20 mm
Minimal Order	250 m ²
Package Weight	1.500-2.000 kg
Colour	White RAL 9003. Other on demand
Colour Position	A

Transport Conditions

Thickness(mm)	Surface* (m ²)	Thickness(mm)	Surface* (m ²)
0,60	3.600	0,80	2.700
0,70	3.100	1,00	2.100
0,75	2.900	1,20	1.800

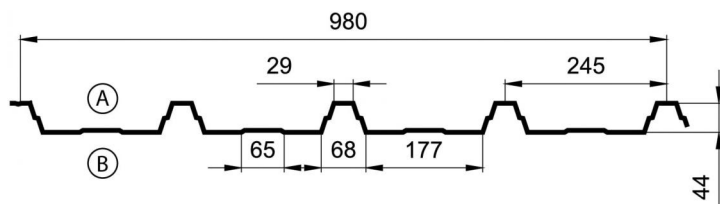
* estimated area depending on cutting length

Note

- Arc Length ($\alpha = 25^\circ$): $1,0324 \times \text{Span (m)} + 0,0384$

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Profile Dimensions



Useful Width: 980 mm

Dimensions in mm

Material Characteristics

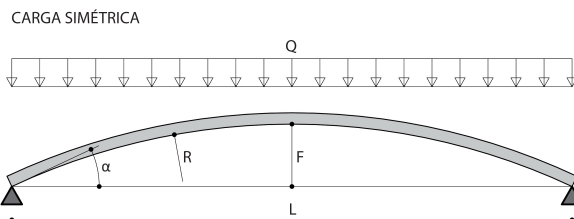
Material	Steel
Elastic limit (N/mm^2)	280
Elasticity modulus (N/mm^2)	2.100.000
Density (Kg/m^3)	7.850

Effective Values

Thickness (mm)	Weight (daN/m^2)	Gross Area (mm^2/m)	M. Inertia (mm^4/m)			M. Resistant (mm^3/m)	
			Gross	Effective +	Effective -	Effective +	Effective -
0,60	6,01	765	185.107	172.264	113.587	5.185	4.841
0,70	7,01	893	215.970	208.515	139.844	6.337	5.764
0,80	8,01	1.020	246.214	245.402	167.450	7.512	6.700
1,00	10,01	1.276	308.597	308.597	226.033	9.359	8.594

Usage Table

Maximum load (daN/m^2)



Thickness (mm)	Span between supports (m)													
	1.6	1.8	2	2.2	2.4	2.6	2.8	3	3.2	3.4	3.6	3.8	4	4.2
0,60	285	248	223	206	195	186	181	170	162	155	149	144	140	137
0,70	374	325	292	270	255	238	220	206	195	187	180	174	169	165
0,80	463	403	362	334	311	280	258	242	229	220	212	205	199	194
1,00	621	540	485	445	391	353	325	305	289	277	267	258	251	244
Radius (mm)	1.893	2.130	2.366	2.603	2.839	3.076	3.313	3.549	3.786	4.023	4.259	4.496	4.732	4.969
Deflection (m)	177	200	222	244	266	288	310	333	355	377	399	421	443	466
Angle (°)	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0

Thickness (mm)	Span between supports (m)											
	4.6	4.8	5	5.2	5.4	5.6	5.8	6	6.2	6.4	6.6	6.8
0,60	131	130	129	128	128	125	119	113				
0,70	159	157	155	155	154	153	151	147	139	131	124	118
0,80	186	184	182	182	181	180	178	174	168	161	152	145
1,00	235	232	230	229	228	227	224	219	212	203	195	194
Radius (mm)	5.442	5.679	5.916	6.152	6.389	6.625	6.862	7.099	7.335	7.572	7.808	8.045
Deflection (m)	510	532	554	576	599	621	643	665	687	709	732	754
Angle (°)	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0

The ELU resistance values at distributed load that appear in the table have been obtained by exploiting the results of experimental tests. For the design of the structure, the maximum horizontal deformation of the support will be limited to 3 mm (pressure) and 30 mm (suction).

Calculation Legend

v21.10.08

$ELU_{up}: Q = 0,80 * (PP + CP) - 1,50 * \text{Wind}$

PP: Own Weight ; CP: Permanent Load

$ELU: Q = 1,35 * (PP + CP) + 1,50 * \text{Use}$

$Q = 1,35 * (PP + CP) + 1,50 * \text{Wind} + 0,75 * \text{Snow}$

$Q = 1,35 * (PP + CP) + 1,50 * \text{Snow} + 0,90 * \text{Wind}$

$ELS: Q = 1,00 * (PP + CP) + 1,00 * \text{Live Load}$

$Q = 1,00 * (PP + CP) + 1,00 * \text{Wind} + 0,50 * \text{Snow}$

$Q = 1,00 * (PP + CP) + 1,00 * \text{Snow} + 0,60 * \text{Wind}$

Reglamentation:

UNE-EN 1993-1-3: Eurocode 3 Part 1-3

Declaration of Performance: www.incofil.com/dop

Calculation report request: www.incofil.com/cyd



EN 14782:2006