

Product





Working Length: Height Profile: 840 mm 70 mm

Description

INCO 70.4 metallic roof for use as free-standing roof for spans of between 8 and 13.3 metres. A light roof which eliminates the need for a support structure. Quicker assembly, reduced costs, structural savings and improved aesthetics.

Free-standing roofs are available galvanized and in different primed colours. Improved acoustics can be obtained with perforated steel. Uses include roofing for padel courts and sports centres. Some of its uses include covering paddel tennis courts or sport center

Aplications

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

Complementary Articles

- INCOPOL 70.4 (Skylight of Polycarbonate)
- Tight Joint INCO 70.4 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. 2.000 / 14.000 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	Α

Transport Conditions

Thickness(mm)	Surface* (m²)	Thickness(mm)	Surface* (m²)
0,60	2.200	0,80	1.700
0,70	1.900	1,00	1.300
0,75	1.800	1,20	1.100

 $[\]ensuremath{^*}\xspace$ estimated area depending on cutting length

Rev. 2021.11

INCO 70.4®

SELF-SUPPORTING ROOF (fy = 280 N/mm^2)



Profile Dimensions

840 210 100 110 (B)

Useful Width: 840 mm

Dimensions in mm

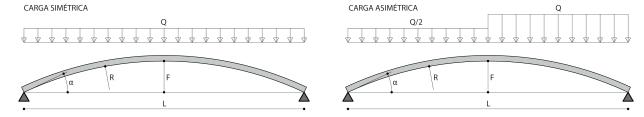
Material Characteristics

Material Steel Elastic limit (N/mm²) 280 Elasticity modulus (N/mm²) 2.100.000 Density (Kg/m³) 7.850

Effective Values

Thickness (mm)	Weight	Gross Area		M. Inertia (mm ⁴ /m)	M. Resistant (mm³/m)			
THICKHESS (IIIII)	(daN/m²)	(mm²/m)	Gross	Effective +	Effective -	Effective +	Effective -	
0,80	9,34	1.190	844.414	790.899	778.881	19.159	18.404	
1,00	11,68	1.488	1.055.919	1.029.987	1.055.919	24.498	25.899	
1,20	14,01	1.786	1.267.596	1.267.597	1.267.597	29.834	31.038	

Usage Table Maximum load (daN/m2)



Thickness	Span between supports (m)																											
(mm)	8	3	8	.5	Ç	9	9	9.5		10		10.5		11		11.5		2	12.5		13							
0,80	361	253	321	226	287	201	256	178	223	157	199	137	170	120	151	104	129	90	112	79	98	69						
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,00	496	348	454	316	409	287	374	260	335	235	303	212	272	191	241	172	216	152	189	132	163	115						
1,00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,20	607	425	554	387	501	352	458	318	410	288	371	259	333	234	295	208	261	183	229	160	197	139						
1,20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Radius (mm)	9.4	65	10.	056	10.	648	11.	239	11.831		12.4	423	13.	014	13.	606	14.	197	14.	789	15	380						
Deflection (mi	88	37	94	42	99	98	1.0)53	1.108		1.164		1.164 1.219		1.275		1.330		1.386		1.441							
Angle (º)	25	,0	25	5,0	25	,0	25	5,0	25,0		25,0		25,0		25,0		25	,0	25	5,0	25	,0	25	5,0	25	5,0	25	,0

	L			
Е	Q1	Q2		
	DT	ST		

Q1: Maximum load ELU (daN/m2) Q2: Asymmetric ELU maximum load

(daN/m²)

DT: Tie Bar Diameter (mm)

ST: Spacing Between Tie Bars (m)

The ELU resistance values at symmetrically and asymmetrically 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 v21.11.29

Combination of Actions:

PP: Own Weight; CP: Permanent Load

ELU: Q = 1,35 * (PP + CP) + 1,50 * Live Load

Q = 1,35 * (PP + CP) + 1,50 * Wind + 0,75 * Snow

Q = 1,35 * (PP + CP) + 1,50 * Snow + 0,90 * Wind

ELS: Q = 1,00 * (PP + CP) + 1,00 * Uso

Q = 1,00 * (PP + CP) + 1,00 * Wind + 0,50 * Snow Q = 1,00 * (PP + CP) + 1,00 * Snow + 0,60 * Wind

 $ELU_{Asymmetric}$: Q = 1,35 * (PP + CP) + 1,50 * Snow

Reglamentation:

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

Declaration of Performance: www.incoperfil.com/dop Calculation report request: www.incoperfil.com/cyd

