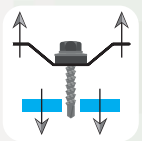
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02100063 i-FYT RCH 6,3 AB

Material	AISI 304 stainless steel		Diameter (mm)	6,3
Heat treatment	Austenitising + quenching + tempering		Drilling capacity	-
Corrosion protection	Stainless steel	Hardness	Surface	-
Lengths (mm)	20 - 280		Core	-
Shear failure load	12.500 N		Tensile failure load	16.000 N



Maximum pull-out force (N)*

Thickness (mm)	4,00	5,00	6,00	8,00
Hole Ø (mm)	5,3	5,6	5,7	5,8
Force (N)	12.050	15.642	16.000**	16.000**

*. Mean test value.

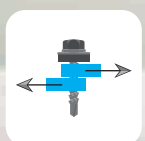
**. Failure by fracture



Maximum pull-over force (N)*

Thickness (mm)	0,50	0,60	0,70	0,80	1,00
Without washer (N)	840	1.008	1.176	1.344	1.680
P 16 washer (N)	1.120	1.344	1.568	1.792	2.240
P 18 washer (N)	1.260	1.512	1.764	2.016	2.520

*. Values obtained from the Spanish structural steel code for an ST37 sheet (350 N/mm2)



Maximum shear force (N)

Thickness (mm)	0,75	0,88	1,00	0,75	0,88	1,00
Section (mm)	4,00	4,00	4,00	8,00	8,00	8,00
Force (N)	4.570	4.520	6.740	4.590	6.250	7.280

*. Values obtained from the Spanish structural steel code for an ST37 sheet (350 N/mm2)

Head
Hexagonal
8 mm





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Translation of the Spanish version; it may contain errors.

FYT
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The values in table 1 are mean test values (ẋ). The following factors are recommended according to CEN/TS 17659:

Table 2 - Recommended material partial (safety) factors for fastening in structural decks of different marterials

Material of structural deck	Nominal thickness	Characteristics [a]	γM
Steel according to EN 10346	0,50 ≤ t < 0,70 mm	yield strength ≥ 280 N/mm^2	2,0
	t ≥ 0,70 mm	yield strength ≥ 280 N/mm^2	1,8
Aluminium according to EN 485	t ≥ 0,70 mm	yield strength ≥ 195 N/mm^2	2,0 [b]
Concrete according to EN 206		Minimum C12/15	2,1 [c]
Light weight concrete according to EN 12602		≥ 500 kg/m^3	3,0 [b]

Material of structural deck	Nominal thickness	Characteristics [a]	γM
Wood - soft wood according to EN 338	t ≥ 20 mm	Minimum C24	1,86 [d]
OSB according to EN 300	t ≥ 18 mm	Minimum OSC/3	1,86 [d]
Plywood according to EN 636	t ≥ 18 mm	Minimum Service class 2 (EN 1995-1-1) Intended application = Structural S	1,86 [d]

a. Recommended for new structural decks.
b. This recommended value is based on hnowledge / experience.
c. This value is based on γ_{inst} = 1,4.
d. γM is the total safety based on κ_{mod} = 0,7 according EC 5.

Example of fastener strength calculation:



Data: Steel purlin 4 mm / Sheet 0,5 mm / with screw i-FYT RCH 6,3 AB with washer 18

1. Tensile strength:
   - From the data sheet values:
     Wtest = 12.050 N/fastener
   - Apply 90% reduction factor:
     Wchar = 10.845 N/fastener
   - Apply safety factor:
     Wadm = 5.423 N/fastener

2. Pull-over resistance:
   - From the data sheet values:
     Wadm = 1.260 N/fastener

The lower of these values is used

Design value of the fasteners: Wadm = 1.260 N/fastener.

A1 REACCIÓN AL FUEGO — Fire protection
A2 — AISI 304
Rolled beam cold-formed
Hot-rolled beam
Beam Concrete
Pre-drilling Required
8 mm — Head Hexagonal
CE ETA European Technical Approval
TÜV NORD PN-EN ISO 9001

Stainless

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