



TEKTON
INGENIERÍA Y CONSTRUCCIÓN

Technial Specifications

GENERAL DESCRIPTION OF THE STRUCTURE

a) Bases of supported columns:

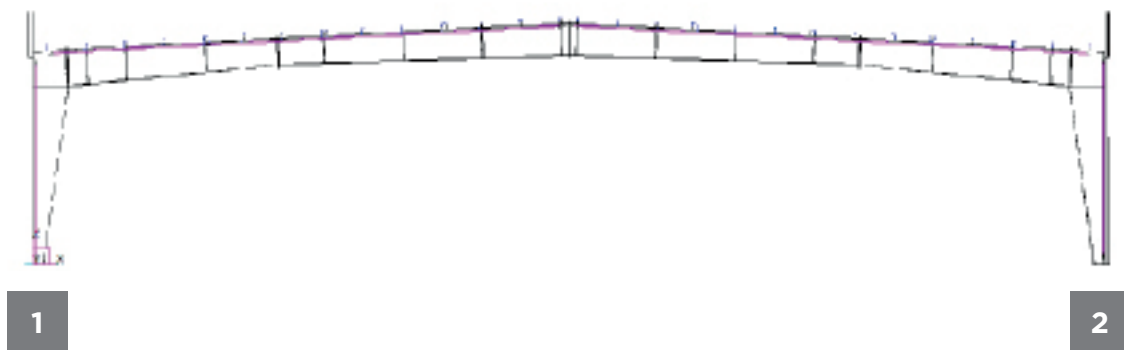
As nothing is embedded, no moments take place in the bases due to rotation settlement.

b) Continuous purlins in walls and roof:

All the purlins have an bolted overlap creating general stability in all gantries, as they are tied together by purlins.

c) Gantry structure with supported bases:

Individually, each gantry undergoes no appreciable deformation due to vertical setting, this being the most frequent. In horizontal settling, which causes outward displacement of the column bases, a situation of plastic deformation is created at points 1 and 2, which practically does not reduce the structure's capacity of resistance.



d) All TEKTON structures are calculated according to the Spanish Technical Building Code (CTE-DB-SE-A) and reviewed according to EUROCODE EC-3.

TYPE OF STEEL IN THE STRUCTURE

PRIMARY STRUCTURE

The Primary Structure is made up of rigid frames, consisting of “double-T” joist beams and columns of variable section, manufactured by welding, using hot-laminated sheet steel..

The type of steel used to manufacture the primary structure will be Fe430.

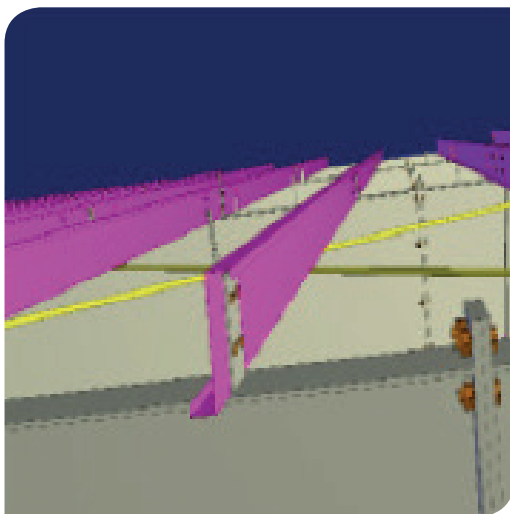
	RESIST. TO TRACTION	FREQUENCY LIMIT	% ELONGATION AT FRACTURE	COMPOSITION		
				C	P	S
<i>Fe430</i>	42 A 53	24 A 26	22 A 24	0,22-0,24	0,05	0,05

The laminated steels used in these structures comply with the Spanish Technical Building Code CTE-DB-SE-TO.

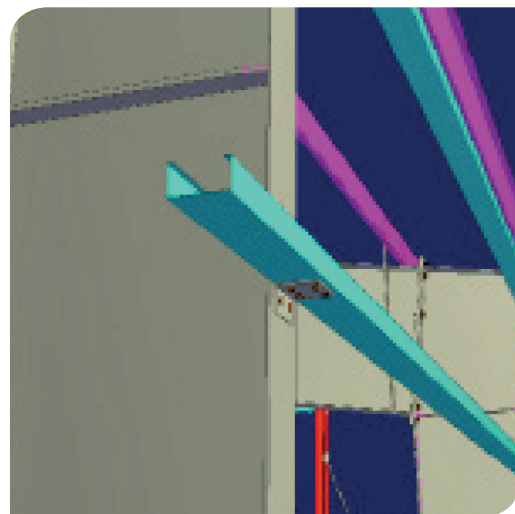
SECONDARY STRUCTURE

The Secondary Structure of the Buildings will be made up of overlapping Z purlins, with continuous C beams and cold-worked support beams, made from laminated sheet metal and cold-worked with S-250GD+Z steel.

ROOF PURLIN



WALL PURLIN



BOLTS FOR STRUCTURAL JOINTS

All high-resistance bolts used in structural joints are of A8T quality (according to DIN standards), with a resistance to traction of 80/100 Kg/mm² and an elongation of 12%, minimum creep limit 64 Kg/mm².

A10T-quality bolts are also used, with a resistance to traction of 100/120 kg/mm², elongation to fracture of 8% and a creep limit of 90 kg/mm².

These bolts are used for the joints that make up the gantry.

All ordinary bolts are of commercial quality, with A4T-quality steel (according to DIN standards), with a resistance to traction of 34 to 55 Kg/mm² and an elongation of 25%; minimum creep limit 21 Kg/mm².

They are used for joining roof and facade purlins to the gantries and to each other.

BRACES

These are used to give the gantry stability against gusts of wind on the front walls and also to align and straighten the structure.

The number and position of braces depend on the type of construction.

Bracing is carried out by using rods with threaded ends with their corresponding elements for attaching and tightening them.

TYPE OF STEEL	RESIST. TO TRACTION	FREQUENCY LIMIT	% ELONGATION TO FRACTURE	COMPOSITION		
				C	P	S
F-112	54 A 74	36	19	0,2 A 0,3	0,035	0,035

PRIMING FOR METAL STRUCTURE

MAIN STRUCTURE MATERIAL TO BE PAINTED

Welded or profiled pieces made from hot laminated sheet steel.

PAINT APPLICATION

Hot-working with Airless electronic equipment.

TYPE OF PAINT

Mono-component quick-drying primer, based on zinc chromate-iron oxide and an inert spreader, with a rust red colour. Applied with an average dry film thickness of 35 microns.

DRYING OF PAINT

In the air, although in order to prevent adherences while stacking pieces, drying may be accelerated by using fans.

TECHNICAL SPECIFICATION PRIMER

REFERENCE	379-326.
COLOUR	Reddish.
SURFACE	Matt.
COMPOSITION	Zinc chromate, iron oxide.
VISCOSITY	75 - 80 K.U. (20°C).
DRYING TIME	To dust: 8 minutes. To touch: 20 minutes. Total dryness: 4 hours.
SPECIFIC WEIGHT	1.41 Kg/L.
CONTENT IN SOLIDS	In weight: 63,3%. In volume: 41,6%.
PERFORMANCE	Theoretical: 11,9 m ² /lto. Practical: 8,9".
DRY WEIGHT	35 microns.
APPLICATION	Pistol, reducing viscosity by adding a solvent.
SOLVENT	Synthetic solvent, Ref. 003-151.
RESISTENCE TO SALINE MIST, INTA 160604.	270 hours, with a thickness of 50 microns.

PRODUCT DESCRIPTION

This is a fast-drying, intumescent, anti-rust primer, adapted for application by pistol on properly-prepared iron or steel surfaces, on which it offers excellent adherence, producing a hard, elastic film.

It is compatible with intumescent paint, shiny or matt alkyd enamels, chlorinated rubber paint, vinyls, nitro-cellulose lacquers, polyurethanes and 2-component epoxies

SECONDARY STRUCTURE

The structure of roof and facade purlins is delivered galvanised, meaning a guarantee against corrosion and zero maintenance.

In the “SENDZIMIR” process, the steel band is continuously galvanised by immersion in a bath of melted zinc which gives it a covering on both sides, according to UNE standards. Additionally, the thickness of the covering is extremely regular because the galvanisation is carried out by a completely automatic process.