AP-TJ

AP-EN

AP-SB

AP-SR

CHARACTERISTICS

- Quick and easy construction, adapting to all types of posts
- Facilitate the construction of hardwood structures that are difficult to nail.
- Save time and labour by allowing for a meticulous finish on the wood.

APPLICATIONS

- Round and square post bases for fencing, garden structures, palisades…
- Joining vertical and horizontal round wooden posts, fencing.

APPLICATION EXAMPLES

SERVICE CLASS

Installation conditions must be known before select a connector for timber, in this way the needed coating can be specified to ensure the properly functioning. According to Eurocode 5, UNE-EN 1995-1-1 the structures must be assigned to one of service classes below:

Service class y recomended finish	
• **Service class 1:** It is characterized by a moisture content in the materials corresponding to a temperature of 20ºC and the relative humidity of the surrounding air only exceeding 65% for a few weeks per year. Dry internal conditions	
• **Service class 2:** It is characterized by a moisture content in the materials corresponding to a temperature of 20ºC and the relative humidity of the surrounding air only exceeding 85% for a few weeks per year. Installation in a closed building without heating, for instance a wood structure.	
• **Service class 3:** It is characterized by climatic conditions leading to higher moisture contents than in service class 2. External conditions.	

Service class 3 is the most restrictive, stainless Steel or hot dip galvanized connectors must be used to avoid the corrosion.

LOAD DURATION CLASSES

The load-duration classes are characterized by the effect of a constant load acting for a certain period of time in the life of the structure. They are classified in the 5 classes below:

Load duration classes	Order of accumulated duration	Examples
Permanent	More than 10 years	Self-weight
Long-term	6 months – 10 years	Storage
Medium-term	1 week – 6 months	Imposed floor load, snow
Short-term	Less than one week	Snow, wind
Instantaneous	Minutes	Wind, accidental load

DESIGN RESISTANCE

Wood connector design resistance must be checked that it shall be higher than applied loads. For that design resistance "R_d" shall be calculated as:

$$R_d = k_{mod} \cdot \frac{R_k}{\gamma_M}$$

Where:

k_{mod} Is a modification factor taking into account the effect of duration of load and moisture content

R_k Is the characteristic value of load-carrying capacity

γ_M Is the partial factor for a material property.

COEFICIENTS

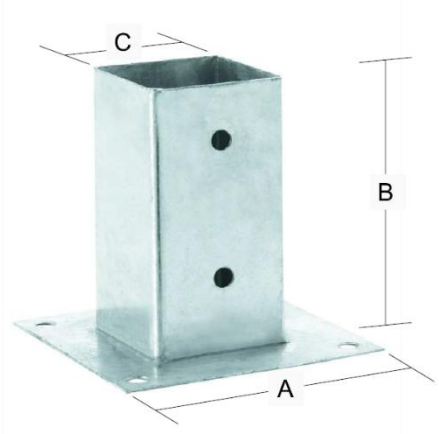
k_{mod} factor depends of the effect of the duration of the load and moisture content. According to Eurocode 5, UNE-EN 1995-1-1 establish the values of this coefficient taking into account the effect of the duration of the load and service class:

Modification factor "k_{mod}"						
Material	**Service class**	**Load duration classes**				
		Permanent	**Long-term**	**Medium-term**	**Short-term**	**Instantaneous**
Solid timber Laminated timber Plywood 	**1**	0,60	0,70	0,80	0,90	1,10
	2	0,60	0,70	0,80	0,90	1,10
	3	0,50	0,55	0,65	0,70	0,90

1. INSTALATION DATA

1.1 AP-SB

Rectangular fence post shoe. Rectangular base



Properties

Steel

Atlantis C3-M coating

Base materials

Solid timber, plywood, laminated timber or concrete

Installation Data

Code	Dimensions [mm]				Fixing holes			
					Base		Post	
	A	B	C	Thick.	Holes Qty.	Holes Dia. [mm]	Holes Qty.	Holes Dia. [mm]
APSB71	150	150	71	Base = 1 / Post = 2	4	Ø10,5	4	Ø10,5
APSB91	150	150	91	Base = 1 / Post = 2	4	Ø10,5	4	Ø10,5

Applications

Support material:

- Fixing timber-timber, timber-concrete

Application range:

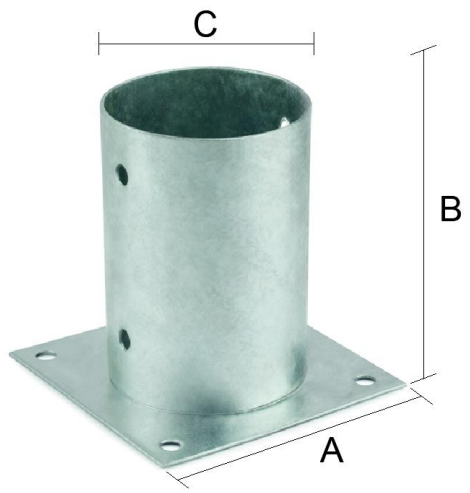
- Post base for small wooden structures, garden structures…

Fasteners

- High performance chipboard screw, TEX
- High performance screw, DIN-571
- Mechanical anchor, MTH or MTA, metric M10
- Chemical anchor + stud bolt metric 10

1.2 AP-SR

Round fence post shoe bolt down square



Properties

Steel

Atlantis C3-M coating

Base materials

Solid timber, plywood, laminated timber or concrete

Installation Data

Code	Dimensions [mm]				Fixing holes			
					Base		Post	
	A	B	A	Thick.	Holes Qty.	Holes Dia. [mm]	Holes Qty.	Holes Dia. [mm]
APSR100	150	150	101	Base = 2 / Post = 2	4	Ø11	4	Ø11
APSR120	175	150	121	Base = 2 / Post = 2	4	Ø11	4	Ø11

Applications

Support material:

- Fixing timber-timber, timber-concrete

Application range:

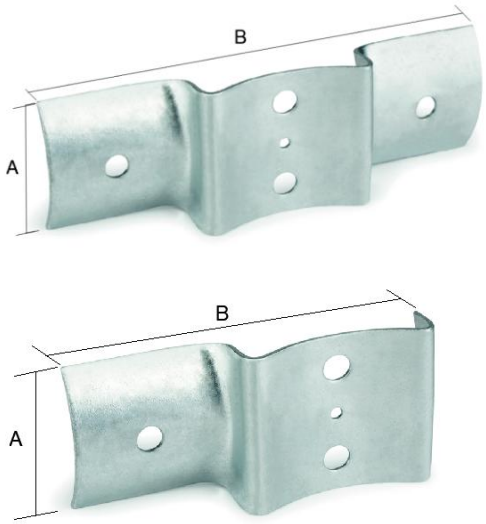
- Post base for small wooden structures, garden structures, fencing…

Fasteners

- High performance chipboard screw, TEX
- High performance screw, DIN-571
- Mechanical anchor, MTH or MTA, metric M10
- Chemical anchor + stud bolt metric 10

1.3 AP-TJ

Texan post clamp



Properties

Steel	Atlantis C3-M coating

Base materials

Solid timber, plywood, laminated timber

Installation Data

Code	Dimensions [mm]			Fixing holes	
	A	B	Thick.	Holes Qty.	Holes Dia. [mm]
APTJ70200	70	208	2,5	4 / 1	Ø11 / Ø5
APTJ70117	70	148	2,5	3 / 1	Ø11 / Ø5

Applications

Support material:

- Fixing timber-timber, timber-concrete

Application range:

- Post base for small wooden structures, garden structures, fencing…

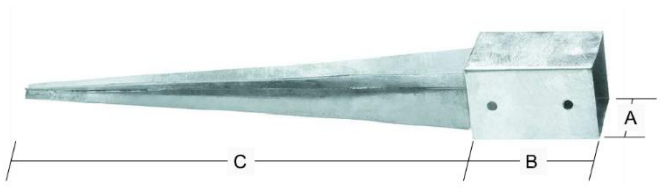
Fasteners

Timber base material:

- High performance chipboard screw, TEX
- High performance screw, DIN-571

1.4 AP-EN

Post base drive in ground



Properties

Steel	Atlantis C3-M coating

Base materials

Solid timber, plywood or laminated timber

Installation Data

Code	Dimensions [mm]				Fixing holes	
					Post	
	A	B	C	Thick.	Holes Qty.	Holes Dia. [mm]
APEN71	71	150	600	2	4	Ø10,5
APEN91	91	150	600	2	4	Ø10,5

Applications

Support material:

- Fixing timber-ground

Application range:

- Post base for small wooden structures, garden structures……

Fasteners

Timber base material:

- High performance chipboard screw, TEX Ø 10
- Bolts metric M10

Ground base material:

- Firmly fixed and buried to the ground.