



## TECHNICAL DATA

## PRESENTATION

**Waterstop profiles to be welded on PVC membrane, in order to make the partition in elementary compartments of the tunnels'extrados waterproofing ,inside which water penetrations will be confined.**

## USES

Longitudinal and transversal partitions of waterproofing systems for underground constructions such as : tunnel, trench, hopper, basement, etc...

## PACKAGING

Rolls of 25 metres or special lengths on request.

## CHARACTERISTICS

Standard composition	: Soft PVC compound.
Harness Shore A	: $70 \pm 3$
Density	: 1.24
Extension at breaking point	: $> 250\%$
Stress at breaking point	: $> 12 \text{ Mpa}$
Modulus at 100% of extension	: $> 6 \text{ Mpa}$
Conventional limitation of flexibility	: $55^\circ\text{C}$

## CHEMICAL RESISTANCE

Fresh, salt or sewage waters, diluted acids and bases, mineral oils, mildew and bacteria.

## STANDARD TYPES

### **1- Transversal partition on expansion joint**

Ref: DF 23 TU (translucent PVC)  
Ref: FF 10/3 TU et FF 100 TU ( grey PVC)

### **2 -Transversal and longitudinal partition on construction joints**

Ref: AF 23 TU (translucent PVC)

### **3 - Relay partition (out of joint)**

Ref: AF 13 TU ( translucent PVC)  
Ref: AF/FF 120 TU et AF/FF 50 TU (grey PVC)

## PRESCRIPTIONS

### 1. Profiles

- The profiles will be submitted to the agreement of the Project manager
- The profiles will be made in translucent PVC, except special cases and/or, if the profiles remain exposed a long time to the effects of sun and external conditions.
- The profiles must be compatible with PVC membranes.
- The good quality of welding on the membrane must be checked by a preliminary test and give a medium peelable resistance up to 4 daN.
- The welding flanges of the profiles must be thin and wide enough to offer a good access to the automatic welding machines.

### 2. Pieces for intersections and junctions

- Pieces for intersections and junctions ( L; T; X; etc ) must be prefabricated in the factory by the Supplier.
- Welded edges will be trimmed carefully

### 3. Welding and junctions

- The welding operations must be stopped by rainy weather and/or if the temperature is under - 3°C.
- The welding between profiles and intersections pieces will be made on site with an electric heating blade
- The welding of the profiles on the membrane will be made preferably, with an automatic machine.
- The minimum width for a single welding will be of 3 cm.

### 4. Checking of the waterproofing system

#### 4.1 By the Project Manager (French Standard : art.11.2.6. of the Fascicule 67 titre III )

- **External checking** on the quality by the Project manager or by a Supervisor operating for himself under contract.

#### 4.2- By the waterproofing Contractor :

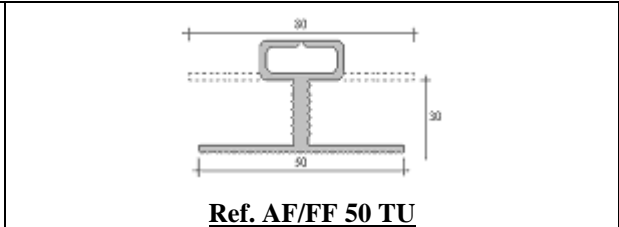
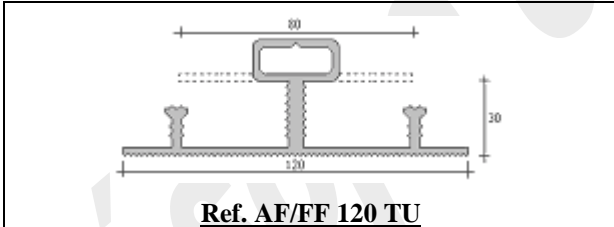
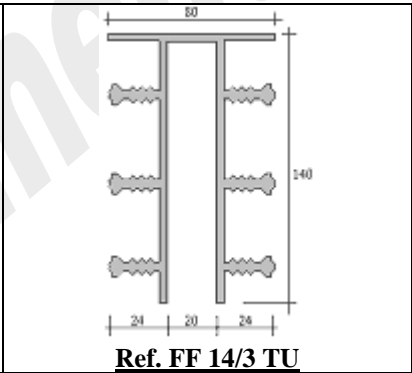
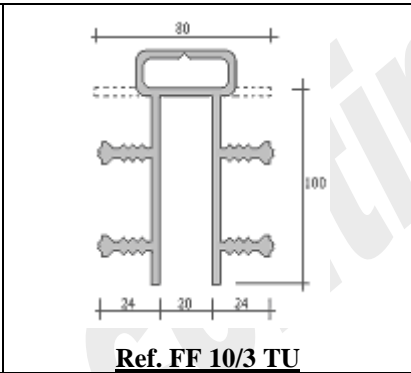
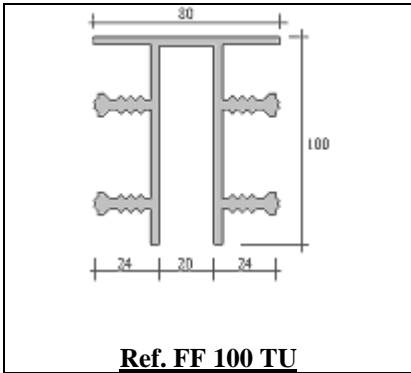
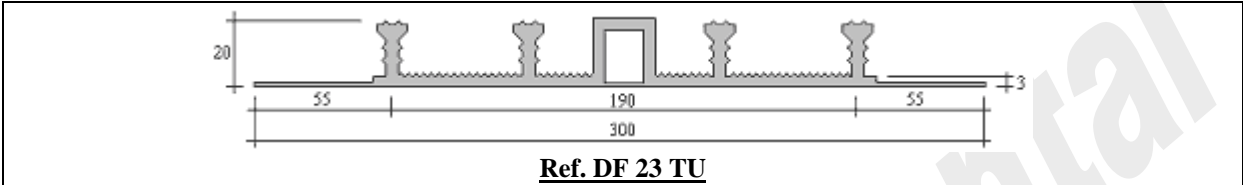
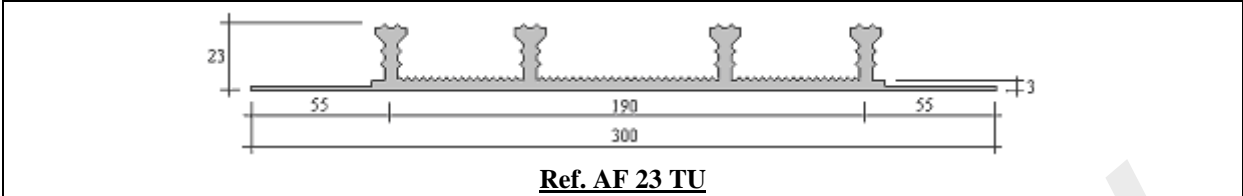
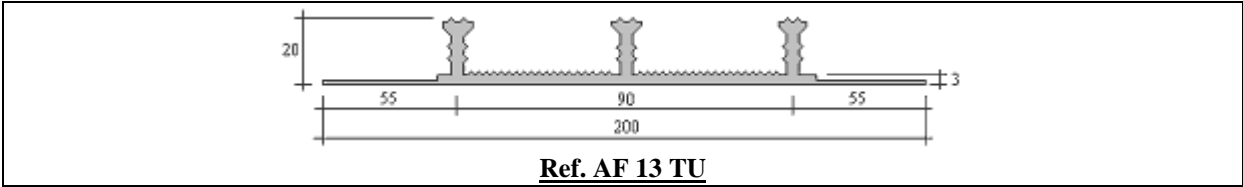
- Preparation of the Quality Plan.
- **Internal checking** on the work by the the Contractor's staff.
- **External checking** on the quality by an independent supervisor as the Contractor. chooses

#### 4.3- By the Supplier of the profiles and pieces :

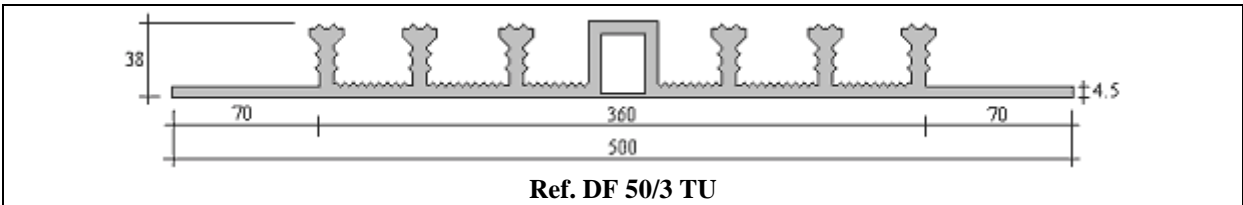
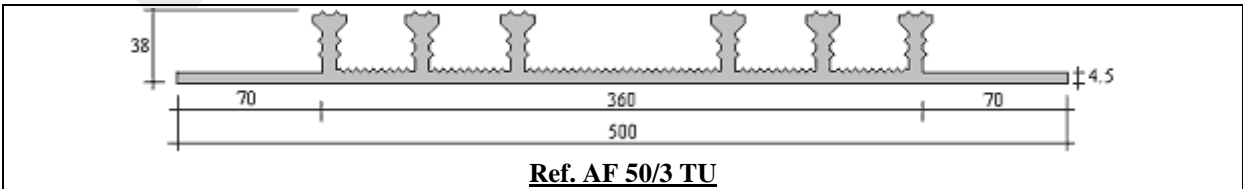
- Checking on the dimensions of the profiles
- Checking on the rough material
- Checking on the quality of the profiles and pieces
- Identifying marks of the profiles indicating :
  - \* Site of production
  - \* Nr of production
  - \* Type of profile
  - \* Quantity

### 5 Storage

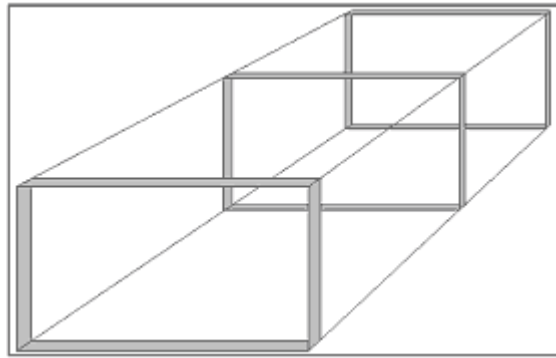
Profiles and pieces will be stored in a temperate warehouse at 10°C minimum, on pallets, with an opaque film as a protection from UV rays and rain.



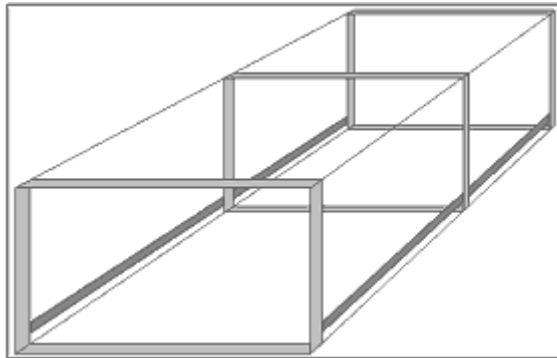
**SPECIAL PROFILES**



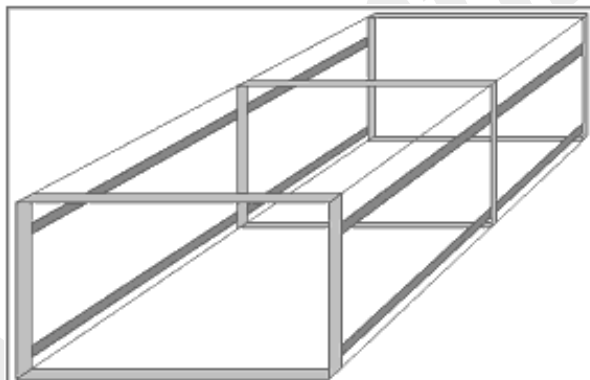
## WATERPROOFING PARTITION SYSTEMS



**1 – Transversal partition**

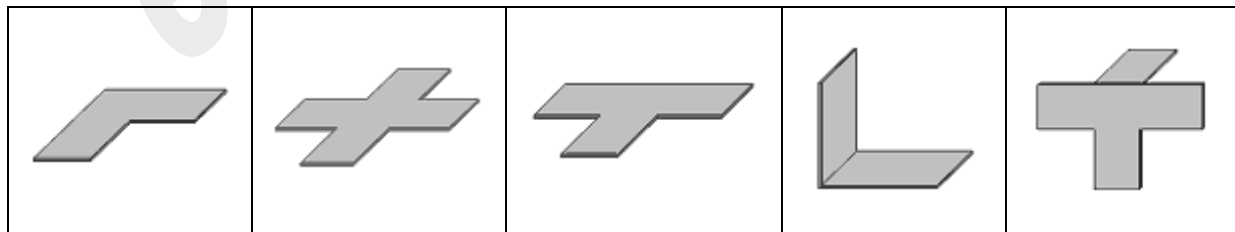


**2 – Transversal and longitudinal partial partition**



**3 – Transversal and longitudinal complete partition**

## INTERSECTION PIECES



**L1P type**

**X1P type**

**T1P type**

**L2P type**

**Special piece**

Length of the wings : 50 cm

The pieces can be homogeneous (with one single profile) or composite (with 2 or 3 different profiles)