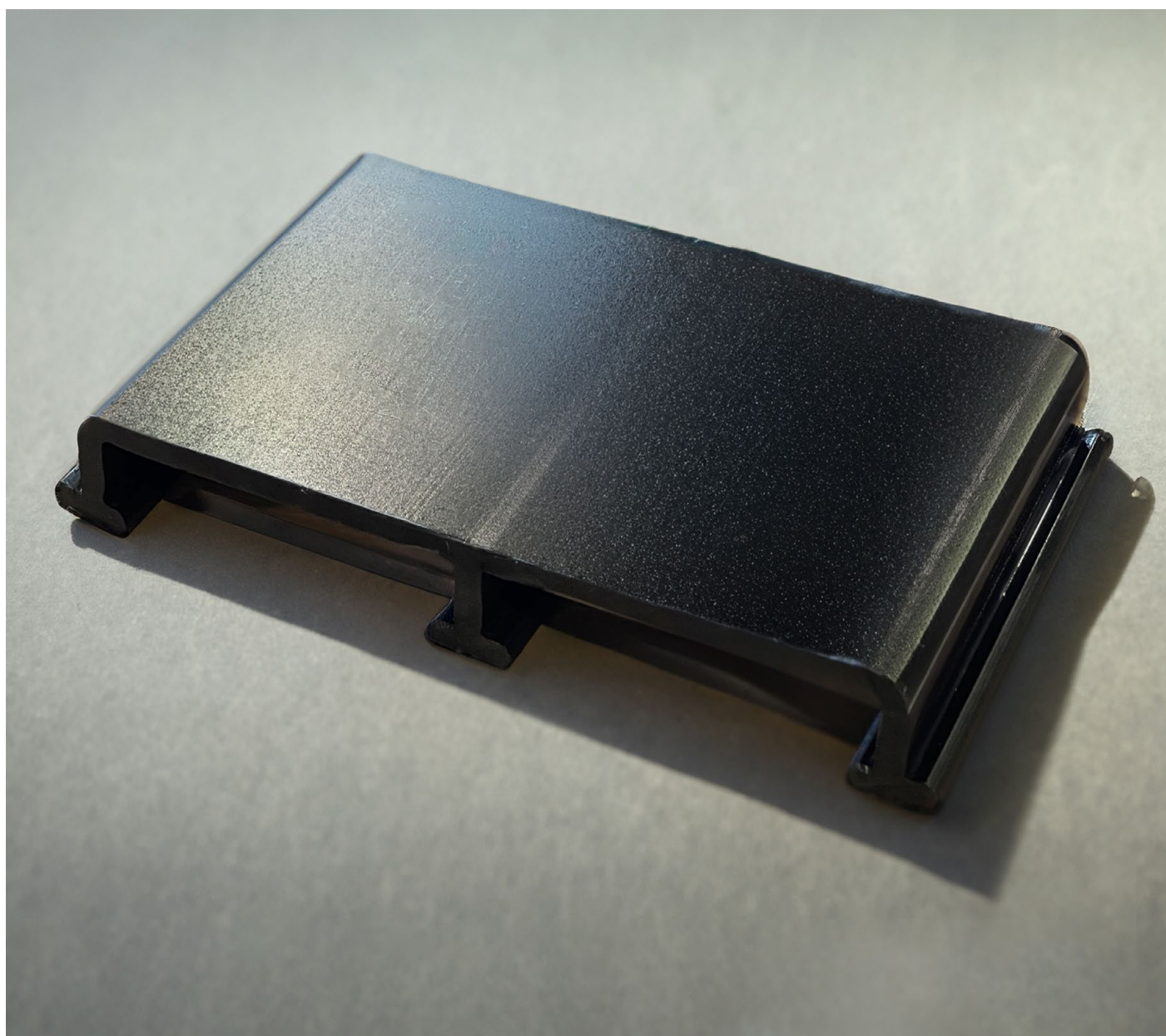




INSTALLATION GUIDELINE

# Polylock T

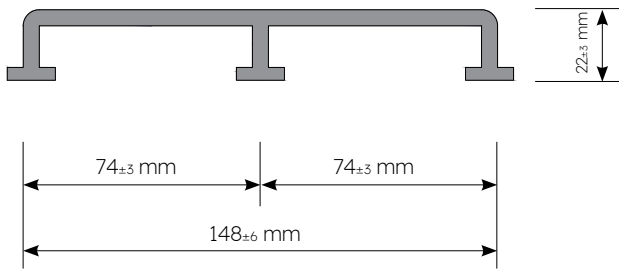


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# 1. OVERVIEW

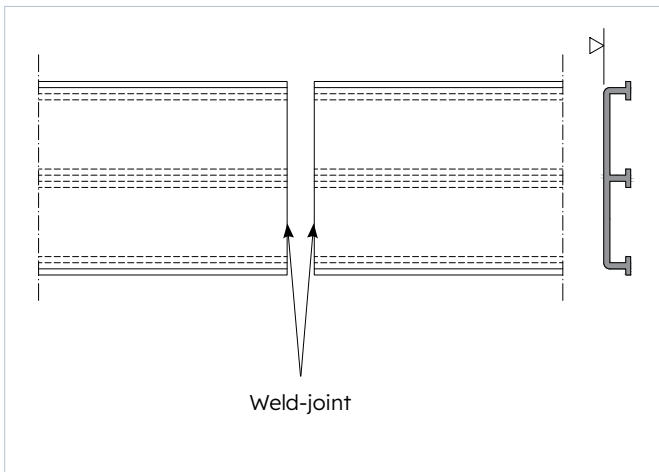


**Polylock T** is produced in a standard length of 5 m. **Polylock T** is applicable in new concrete structures. It enables a watertight connection between the concrete structure and the Solmax Lining system. It is very easy to weld **Polylock T** with a hot air welder, which has a mirror adapter (these items are commercially available). The exact cutting to installation length; the welding; and the installation of **Polylock T**, has to be carried out by the construction company on job site.

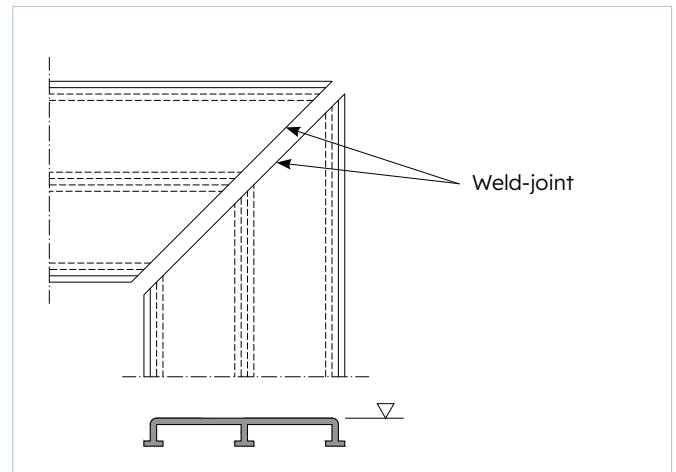
## 2. TYPE OF JOINTS

It has to be differentiated between 4 basic types of profile-butt-joints:

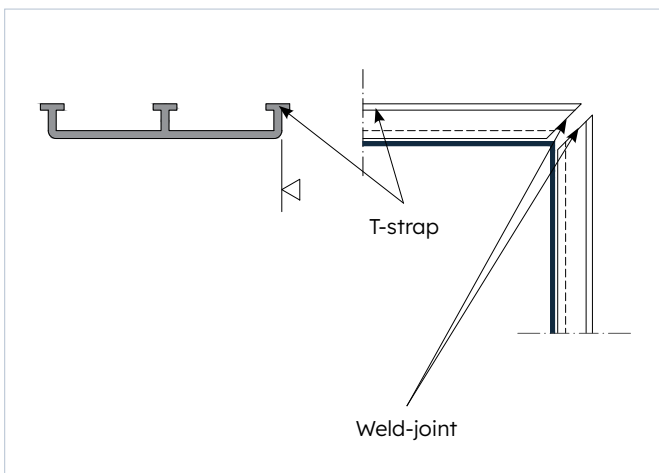
### Straight-joint



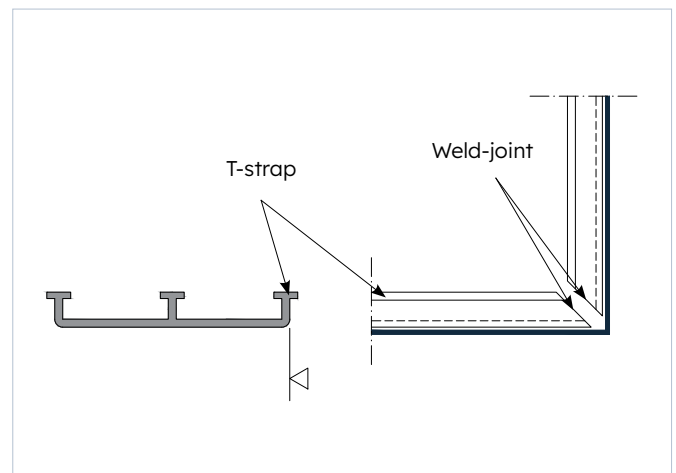
### Angle joint



### Corner-joint, (inner)



### Corner-joint, (outer)



### 3. JOINING METHODS

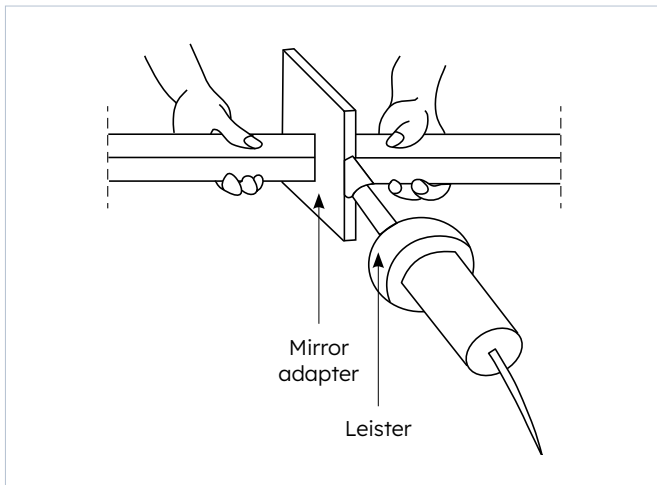
#### Equipment

Hot air welder (e.g. Leister Triac or similar) with mirror adapter  
Welding mirror 250 x 250

#### Work cycle

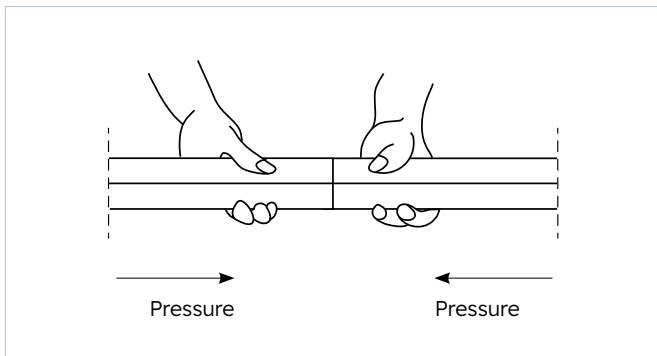
The butt joint-faces of **Polylock T** have to be cut even and plain dependent to the necessary angle.  
They can be cut with either a compass saw or a metal cutting saw, for a smooth weld joint face.

#### Phase 1



The hot air welder with mirror adapter (e.g. Leister Triac or similar) has to be preheated (temperature ~ 220 – 250 °C). Both prepared weld joint faces have coplanar to be held toward the welder under slight pressure.

#### Phase 2

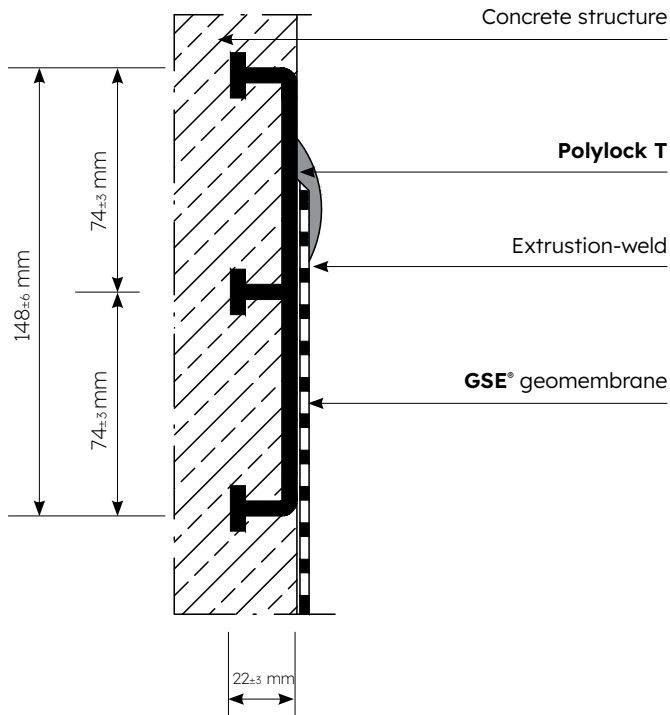


When the melting point is reached, (the material becomes soften malleable, on the sides it bulges) both weld joint faces have to be pressed together, with high pressure (pressing time max. 30 seconds).

Note: Extrusion welding of the profile is possible. However, a technical watertight connection to the concrete structure is only achieved when the T-bars are also jointed to each other.

## 4. INSTALLATION OF POLYLOCK T

After butt-welding, **Polylock T** has to be installed into the formwork. There is a differentiation between vertical and horizontal installation.



### 4.1 Vertical installation

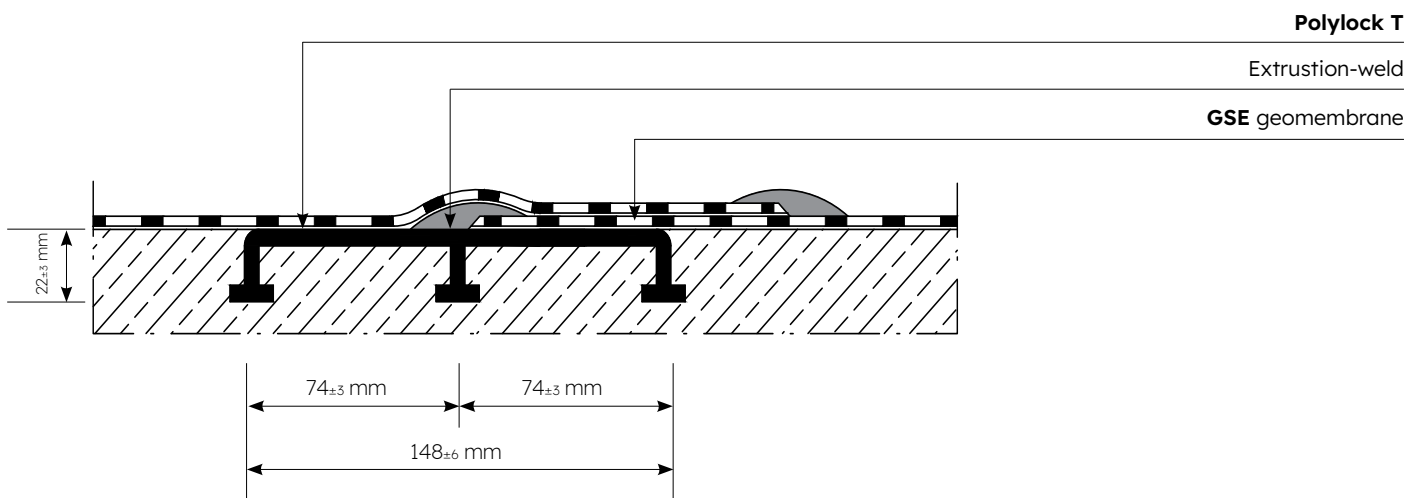
**Polylock T** has to be fixated to the formwork with nails, approximately every 30 cm (alternating sides). The length of the nails has to be chosen depending on the thickness of the shutter-boards (between 20 – 30 mm).

### 4.2 Horizontal installation

The horizontal installed **Polylock T** has to be looped with 4 – 5 mm large drill holes, every 1 m (alternating sides) for air vent. **Polylock T** has then to be pressed under slight pressure and vibration (air vent through drill holes) into the fresh concrete (quality min. C20/25) and afterwards to be burdened until the concrete has hardened.

## 4. DISMANTLING OF FORMWORK, INSTALLING THE LINING SYSTEM

After dismantling of formwork, **Polylock T** has to be cleaned from concrete rests and remaining fixation nails have to be removed. Now the geomembrane can be welded by a welding-technician to the **Polylock T**.



### **About Solmax**

Solmax is a world leader in sustainable construction solutions, for civil and environmental infrastructure. Its pioneering products separate, contain, filter, drain and reinforce essential applications in a more sustainable way – making the world a better place.

The company was founded in 1981, and has grown through the acquisition of GSE, TenCate Geosynthetics and Propex. It is now the largest geosynthetics company in the world, empowered by more than 2,000 talented people. Solmax is headquartered in the province of Quebec, Canada, with subsidiaries and operations across the globe.

### **Uncompromised quality**

Our products are manufactured to strict international quality standards. All our products are tested and verified at our dedicated and comprehensive laboratories which maintain numerous accreditations. We offer our partners a wide scope of testing according to published standards to ensure products delivered to sites meet specified quality requirements.

# Let's build infrastructure better



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