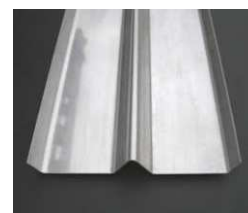


## Fradiflex® chemically resistant joint waterproofing (# FFBSSCHEM316)



CHEM 316 – Stainless Steel waterstop for use in severe chemical and high temperature containment applications.

### Product

#### Description

**Fradiflex® Stainless Steel waterstops** are available in various alloys. These waterstops provide good to excellent chemical and temperature resistance. Stainless Steel waterstops are an alternative for use in severe chemical and high temperature containment applications.

#### Uses

**Fradiflex® Stainless Steel waterstops** are for use in concrete joints subjected to severe chemical, ozone or high temperature exposure. Embedded in concrete, stainless steel waterstops span the joint to form a continuous, watertight diaphragm, that prevents the passage of fluid. The waterstop must be designed and installed properly to accommodate joint expansion, contraction and other lateral and transverse movements.

#### Characteristics/ Advantages

- *Broad temperature range for application*
- *Highly resistant to most encountered chemicals*
- *Covers construction cold joints and expansion joints*
- *Can be used in conjunction with Stremaform® stop end form work*
- *Can be customized as an load transfer expansion joint in trafficked slabs*

### Tests

#### Approvals/ Standards

Manufactured in Germany under ISO 9001:2008 (IQnet)

### Product Data

#### Appearance

Rolled and deformed grade SAE 316L (1.4404) grade steel

#### Packaging

##### Fradiflex® Chem 316 profiles

Custom packaging upon request, actual dimension per customer request

#### Storage

If stored in unopened, undamaged, original packaging and protected from the elements at temperatures between -20°C and +80°C, the shelf-life indefinite from date of production. Keep in dry conditions, horizontally or vertically and do not stack pallets on top of each other.

#### Technical Data

Property Test Method	Grade 316L	
Ultimate Tensile Strength	ASTM A 370	75,000 psi (515 Mpa)
Duct Elongation in 2" min.	ASTM A 370	40 %
Rockwell B Hardness	ASTM A 370	95 max.
Yield Strength	ASTM A 370	30,000 psi (205 Mpa)

#### DISCLAIMER/NOTES

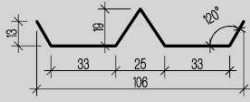
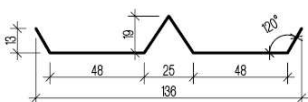
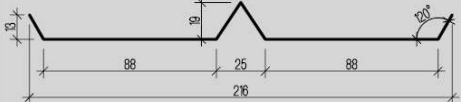
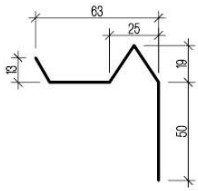
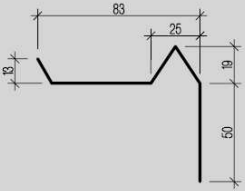
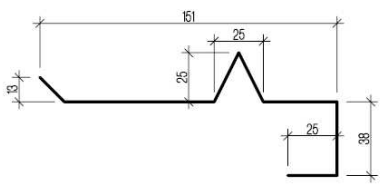
##### VALUE BASE:

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

##### LEGAL NOTES:

Recommendations with regard to product application given in the present technical data sheet for practical assistance of product users are based on our experience and our present scientific and practical body of knowledge. These recommendations, however, are given without engagement and do not establish a contractual relationship or subsidiary duties. These recommendations do not relieve users of their liability and of their own responsibility to test, whether our product is adequate for the intended purpose of application.

## Fradiflex<sup>®</sup> CHEM 316 Profile overview

<p><b>316.1</b></p>  <p>(mm)</p>	<p><b>316.2</b></p>  <p>(mm)</p>	<p><b>316.3</b></p>  <p>(mm)</p>
<p><b>316.4</b></p>  <p>(mm)</p>	<p><b>316.5</b></p>  <p>(mm)</p>	<p><b>316.6</b></p>  <p>(mm)</p>

Below is a general list of items required for performing TIG welds in the field.

### Consumables

- Tungsten electrode - .040, 2% Thoriated AWS Class EWTH-2 (red identifying band). Prepare a pointed-end for DCEN welding (DC-Straight Polarity)
- Wire – 316L .030
- Backing Flux – Solar B Flux mixed with methanol to paste-like consistency (brushed on the underside of the weld section to prevent contamination of the weld as the Argon gas does)
- Shielding Gas – Argon 100%

### Equipment

- WP20 – Weldcraft TIG Torch, Air Cooled with Flow Meter for Argon or similar
- Torch Accessories
  - .040 Collet
  - 45V42 Collet Body Gas Lens
  - 53N60 Ceramic Cup Gas Lens with 3/8" orifice
- Welding Hood with #9 lens
- Light weight gloves with gauntlets

### Working Conditions

- Minimum ambient temperature -20°C
- Shield against winds over 35 km/h

Use LPS Zero Tri Spray cleaner or equivalent to ensure material is free of dirt, grease, water, etc.

Manual Welding Parameters for 316L Stainless Steel							
Welding Method	Thickness (cm)	Current (amps)	Voltage (volts)	Filler Rod (AWS)	Argon Flow (m <sup>3</sup> /h)	Weld Speed (cm/min.)	Wire Feed (cm/min.)
TIG	7,5	30/70 DCEN	12-14	ER316L	0,03	5-10	as required