

SP Sveriges Tekniska Forskningsinstitut SP Certifiering Box 553 SE-371 23 Karlskrona SWEDEN

Tel: +46 10 516 63 00 Web: www.sp.se Mail: eta-se@sp.se





#### **European Technical Assessment**

**ETA 16/0221** of 09/03/2016

#### **General Part**

Technical Assessment Body issuing the ETA: SP Sveriges Tekniska Forskningsinstitut

Trade name of the construction product Hisslyft Pretec

**Product family to which the construction**Pre-installed elevator lifting device product belongs

Manufacturer Pre Cast Technology AB, Box 552, SE-44216 Kungälv, Sweden

Manufacturing plant(s) Pre Cast Technology AB, Kungälv, Sweden

**This European Technical Assessment contains**6 pages including 3 Annexes which form an integral part of this assessment.

This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of

European Assessment Document 330075-00-0601, edition February 2015.

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction has to be identified as such.

#### Specific parts

# 1 Technical description of the product

The Pretec Hisslyft (elevator lifting device) consists of a threaded steel rod, a chain link made of steel and a plastic housing. The threaded rod is bent about 20° at the middle. Materials and dimensions according to Annex A.

The plastic housing is equipped with a plastic cover that is removed when the embedded product is going to be used.

The product is assembled as shown in Annex C.

# 2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

The product is intended to be cast into the roof of an elevator shaft, to transfer the load from the elevator car to the concrete slab during the elevator installation. It can be used for precast and cast in situ slabs.

A wire, or similar, can be attached to the chain link when the product is fully cast in and the plastic cover has been removed.

The lifting device is intended for mainly tensile loads where only small angular deviations are allowed. The lifting device is intended to carry mainly static or quasi-static loads.

# 3 Performance of the product and references to the methods used for its assessment

#### 3.1 Essential characteristics and their performance

		Characteristic	Performance	
BWR 2	Safety in case of fire	Reaction to fire	Metallic parts: Class A1	
BWR 4	Safety in use	Load bearing capacity	See 3.1.1	
		Durability (Corrosion resistance)	See 3.1.2	

#### 3.1.1 Load bearing capacity

Provisions for the load capacity are described in Annex C.

#### Characteristic capacity

175 kN.

The characteristic capacity is defined as the 5 %-fractile of the ultimate loads measured in a test series at a confidence level of 75 %.

#### **Design capacity**

40 kN.

The design capacity is calculated by using safety factor > 4.

## 3.1.2 Durability (Corrosion resistance)

Durability aspects are mainly linked with coating weights and related mass loss rate in relation to the concerned corrosivity category.

The threaded steel bar is electro galvanized according to EN ISO 4042, Fe/Zn 5c1A.

# 4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base

According to the decision 97/161/EC the system of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011) given in the following table apply:

Product(s)	Intended use(s)	Level(s) or class(es)	System(s)
Elevator lifting device	To transfer load from an elevator car to the concrete slab during elevator installation	-	2+

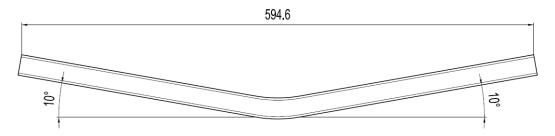
# 5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at SP Sveriges Tekniska Forskningsinstitut.

Issued in Borås on 09.03.2016 By SP Sveriges Tekniska Forskningsinstitut

> Lennart Månsson Certification Manager

## Threaded steel rod

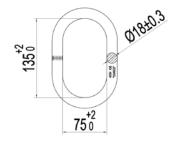


Material: 8.8 according to EN ISO 898-1

Surface coating: Electro galvanized according to EN ISO 4042, Fe/Zn 5c1A.

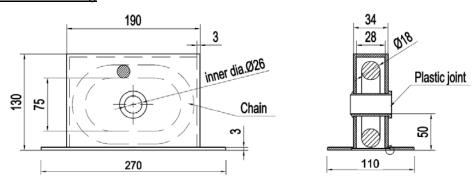
Thread: M24, tolerance class 6g according to ISO 965-2 before surface coating.

## Chain link



Material: Carbon steel 20Cr4 Welding according to ISO 5817 part C

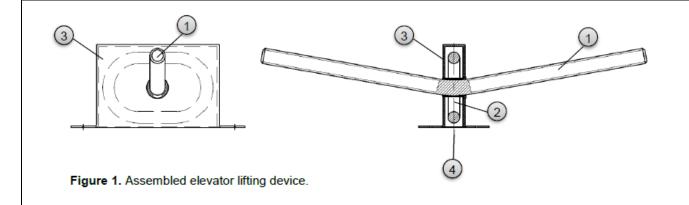
## Plastic housing



Material: HIPS (High Impact Polystyrene)

**Product description**Materials and dimensions

Annex A of European Technical Assessment ETA 16/0221



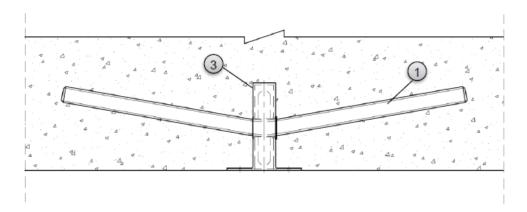


Figure 2. Fully cast in elevator lifting device.

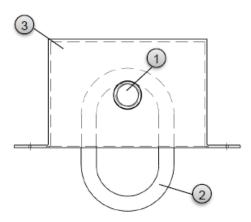


Figure 3. Precipitated chain link.

#### Legend:

- Threaded steel rod
  Chain link
- 3. Plastic housing
- 4. Plastic cover

**Product description** Assembled system

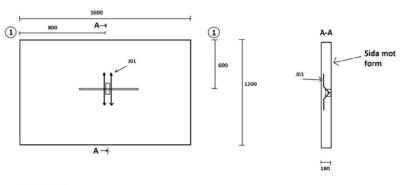
Annex B of European **Technical Assessment** ETA 16/0221

Min. thickness of concrete slab

180 mm

Min. concrete quality

C25/C30

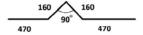


Betong C25/30 Täckskikt 20 mm

Nätarmering UK: 1 NPS 8-150 ÖK: 1 NPS 5-150

1 Hisslyft Pretec

J01: Ø16 K500C Klipplängd= 1200mm Bockradie= 32mm 1 bygel på varje sida. Totalt 2 st. J-bygel läggs direkt mot gängstång och plasthylsa



4 st plattor totalt

3 kuber per betongblandning/platta

Märkning som sammakopplar kub med platta samt datum för gjutning

Kuber lagras tillsammans med plattor

Certifikat på armering. Helst materialcertifikat för J-bygel, men minst SBS-certifierat.

Performance of the product Installation provisions

Annex C of European Technical Assessment ETA 16/0221