

ANNEX C

INSTALLATION, USE AND MAINTENANCE

“TDX” Flexible Liner

1) INSTALLATION

The flexible liner is suitable for the restructuring of already existing flues with an irregular shape. The tubing of flexible liner inside the shaft starts usually from the top of the building, pulling the end of the pipe towards the bottom using a rope which can be hooked to pipe whether through a proper connection element (see Picture 1) or with a simple knot around its circumference.

An arrow shows the right installation direction which points out the fumes direction, to avoid condensate leakage. Once the flexible liner has been put inside the shaft, its connection with rigid elements of SP series is guaranteed through the use of accessories TFX and TFXU.

The junction of two flexible pipes can be obtained using the GFX accessory.

Flexible liner must be still inside the shaft through proper wall fixing with the use of chimney support (rigid single wall element of SP series). The flexible liner can also be installed with a ground fixing using the base with side condensate drain (rigid single wall element of SP series).

Special collars can be used to centre the flexible liner inside the shaft. The flexible liner can not be used as connecting flue pipe to connect in horizontal direction the heat generator to the vertical chimney.

All rigid elements of single wall SP series connected to flexible liner are mounted with the female side upward and the male one downward to avoid condensate leakage. For ground fixings (see side picture) under the flexible liner shall be put the tee piece, the inspection element and the condensate collector.

2) USE

The use of flexible liner follows thermal capacity and current standards.

3) WORKING :

- with negative pressure

The TDX flexible liner works with negative pressure (N1 class), and it has the following designation in accordance with the standard EN 1856-2:2009 :

T600 N1 W V2 L50010 G
T600 N1 W V2 L50012 G

Where:

T600: temperature class

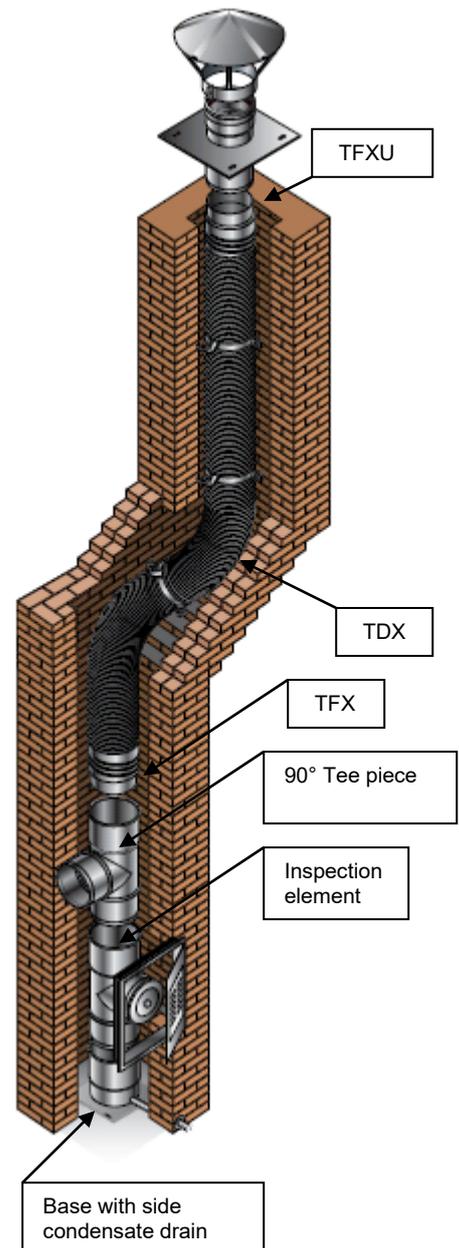
N1: level of negative pressure

W: condensate resistance, the flexible liner is fit for wet working

V2: corrosion resistance class

L50010-L50012 : specification of internal wall material
material: 1.4404 (AISI 316L)
thickness : 0,10 mm and 0,12 mm

G : the flexible liner is soot fire resistant



Picture 1

The available diameters are:

80, 100, 110, 120, 125, 130, 140, 150, 160, 180, 200, 220, 230, 250, 280, 300, 350.

4) IDENTIFICATION METAL PLATE OF CHIMNEY

At the end of installation, the installer shall fill up the identification metal plate of flexible liner (supplied by manufacturer) and shall put it near or at the base of the chimney.

On metal plate shall be written the installer data, the designation of installed flexible liner (according to standard EN 1443), the nominal diameter and the distance from combustible materials.

Roccheggiani product designation according to the standard EN 1443, is:

for negative N1 pressure working : Flexible Liner EN 1443 T600 N1 W 2 G

Where:

T600: temperature class

N1: pressure level (N1 negative pressure class)

W: condensate resistance, the flexible liner is fit for wet working

2: corrosion resistance class for Italian market

G: soot fire resistance

Hereunder we show an example of the identification metal plate

 <p>ROCHEGGIANI® <i>care for air</i></p>	<p>Via 1° Maggio, 10 60021 Camerano (AN) – ITALIA Tel.+39.071.7300023 Fax.+39.071.7304005 e-mail: info@roccheggiani.it</p>	
<p>“TDX” series</p> <p>FLEXIBLE METAL LINER EN 1856-2 T600 N1 W V2 L50010 G T600 N1 W V2 L50012 G Cert. N° 0036 CPD 9811 012</p>		 0036
<p>Space for the installer</p>		
<p>Designation according to EN 1443: _____</p>		
<p>Nominal diameter: _____ mm</p>		
<p>Distance to combustible material: _____ mm → </p>		
<p>Installer (name, address): _____ _____</p>		
<p>Installation date: _____</p>		
<p>ATTENTION: The metal plate shall not be removed or changed!</p>		

5) MAINTENANCE

Maintenance of flues carried out with flexible liner consists in regular checks of flues and also visual checks.

Controls are carried out also for: the right connection of modular elements, the integrity of flexible liner, the cleaning and removal of internal sediments (wall cleaning had to be carried out with materials that do not change the features of stainless steel, for example nylon brushes), the disposal of acid condensations or rain through the discharge, and through the inspection opening for solid materials which may obstruct the right outflow of rain condensates.

6) STORAGE

Flexible liner, for diameters from 80 to 200 mm, should be packed in rolls having a length of 10-20-30 m.

These are protected by nylon film or put inside carton/plastic boxes. For diameters bigger than 200 mm the flexible liner is supplied in loose bars.

The flexible liner, during the storing, should be kept in a non-corrosive environment and should not be placed outside the building exposed to state of the atmosphere.

Note: further information and translations are available on our Internet web site www.roccheggiani.it