

3M Speed Reducers

■ General description and Italian regulation

3M Speed Reducers are raised devices constituted by vulcanized rubber modules showing reflective and antiskid strips in 3M tape Stamark series 5700. Their use is regulated in Italy by the Traffic Code (section nr.42) and by the Law Decree nr.495 published on December 16th 1992.

According to these regulations, speed reducers can be installed only in residential areas, public and private parks or parkings. This is necessary in order to reduce the speed of vehicles and preserve the safety of pedestrian. The three different types of 3M Speed Reducers have been approved by the Italian government for different purposes of installation.

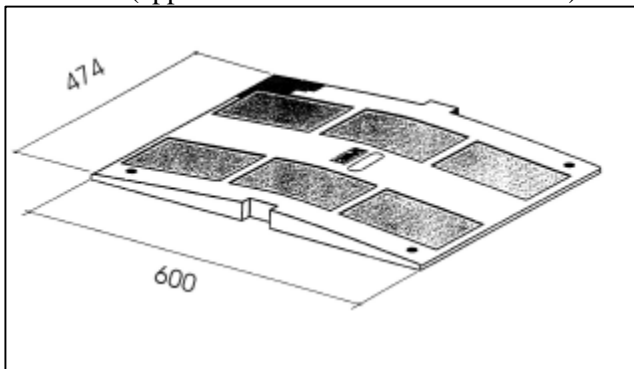
■ Characteristics and Dimensions

The modules are provided with dovetail joint in order to assure a good distribution of the stress on the whole series.

For the 5 and 7 cm versions, end parts that close the series are available.

The single elements have the following dimensions :

- **Height 3 cm**, for roads with speed limit ≤ 50 Km/h (approved with DM n°3195 14/11/94)

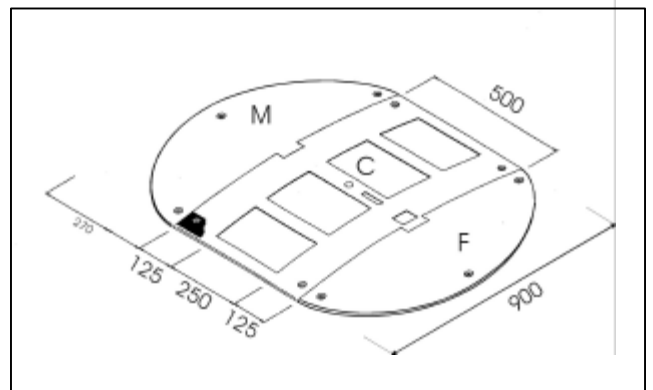


Device h 3 cm : Central Element

- central elements : 47,5 x 60 cm, fixed with 4 nails

- no end parts available

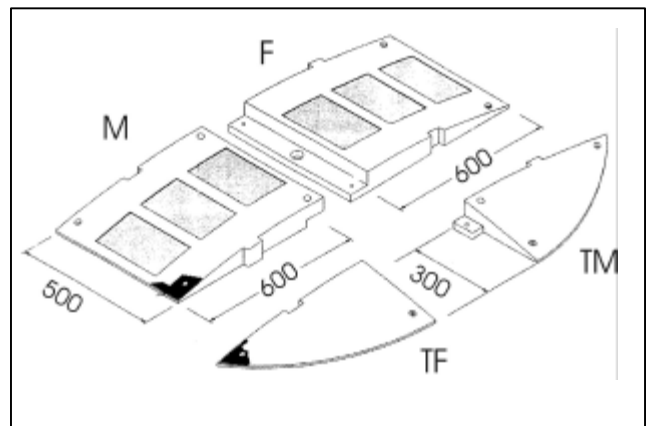
- **Height 5 cm**, for roads with speed limit ≤ 40 Km/h (approved with DM n°698 31/03/98)



Device h 5 cm : M = Male End, C = Central Element, F = Female End

- central elements : 50 x 90 cm, fixed with 5 nails
- end parts (male and female) : 27 x 90 cm, fixed with 3 nails

- **Height 7 cm**, for roads with speed limit ≤ 30 Km/h (approved with DM n°4072 01/08/97)



Device h 7 cm : M = Male, F = Female, TF = Female End, TM = Male End

The single elements of the series are divided into two pieces male and female overlapped, for dimensions and weight reasons.

- central elements (male + female, complete) : 50 x 120 cm (= 2 x 60 cm), fixed with 6 nails
- end parts (male + female, complete) : 30 x 120 cm (= 2 x 60 cm), fixed with 3 nails

■ **Application**

Speed Reducers are to be installed using expansion dowels (included in the supply) which allow a perfect fixing to the road paving and the possible removal of the devices as required by the Law Decree nr.495.

Place the speed reducers in the position that they will assume at the end of the installation and bore the pavement using a 10 mm ϕ drill. The hole should be 140 mm deep. Remove the speed reducers in order to insert the expansion dowels in the holes; re-place the speed reducers in their right and final position and screw the nails in the dowels.

It is important to be sure that the position of the nails inside the hole is perpendicular to the paving, in order to assure a correct distribution of the stress on the whole device.

Important

The fixing system described is the only one responding to our technical specification and

approved by the Italian Ministry for Public Works.

3M assumes no responsibility for installations carried out using different mechanical devices or adhesive systems.

The use of any kind of adhesive instead of the expansion dowels, should be avoided since it would prevent the correct downflow of rain under the speed reducers and their possible removal, which are requirements of the Law Decree nr.495

It is important to pay a special attention to the application in case of pavement and traffic load different from those normally present on our roads: in case of very stiff surfaces (like concrete) and with the typical traffic of industrial areas (articulated lorries, etc.), the installation of speed reducers should be avoided since is not guaranteed. The technical service is available to evaluate specific cases and for any further explanation concerning particular situations and requirements. On the other hand, no responsibility can be assumed in case of installations not respecting the technical specification provided and the quoted prescriptive references.

■ **Literature**

- Tech Bulletin n.1015
3M Fixing System for Speed Reducers

■ **Important for the purchaser**

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable. Before using, user shall determine the suitability of the product for the intended use, and user assumes all risk and liability whatsoever in connection therewith.

3M assumes no responsibility for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Any complaint for defective material or quality problems due to source failures, must be communicated to our Tech Service by written notification. The purchaser is entitled only to the replacement of such quantity of the product proved to be defective, or in lacking, to the refund of the paid price, but for no reasons, the compensation can exceed this price.

3M shall not be liable for applications not executed according to published 3M Tech Bulletin and Information Folders.

3M Italia S.p.A. - Traffic Control Materials Division
Via San Bovio, 3 – loc. San Felice – 20090 Segrate MI – ITALY
fax +39.02.7035.2478