PRODUCT INTRODUCTION	Title: **Fire protection of pipes made of inflammable materials with PS pipe cuff**

PS and PS 25 FIRE PROTECTION PIPE CUFF – Provides the highest level of fire protection for plastic pipes. The fire protection walls give good protection against the destroying power of fires. The weak points are the pipelines through which the fire can spread over the neighboring rooms. The easily applicable pipe cuffs can fully close down every plastic pipe through their outstanding heat-swelling ability.

1.0. Devices needed for the application

Rock-drill machine, screwdriver, pliers (combined), hammer

2.0. Materials to use

Pipe cuff – according to the pipe diameter
Metal dowel with screw; pin groove (dowel wedge); plastic dowel with wooden screw
Pipe cuff measures:

PS cuffs			PS-25 cuffs		
Diameter	Width	Thickness of the laminate	Diameter	Width	Thickness of the laminate
Ø 50 mm	30 mm	5,0 mm	Ø 50 mm	60 mm	5,0 mm
Ø 63 mm	30 mm	5,0 mm	Ø 63 mm	60 mm	5,0 mm
Ø 75 mm	30 mm	7,5 mm	Ø 75 mm	60 mm	7,5 mm
Ø 90 mm	30 mm	7,5 mm	Ø 90 mm	60 mm	7,5 mm
Ø 110 mm	30 mm	10,0 mm	Ø 110 mm	60 mm	10,0 mm
Ø 125 mm	30 mm	10,0 mm	Ø 125 mm	60 mm	10,0 mm
Ø 160 mm	30 mm	15,0 mm	Ø 160 mm	60 mm	15,0 mm
Ø 200 mm	60 mm	20,0 mm	Ø 200 mm	60 mm	20,0 mm
Ø 225 mm	60 mm	20,0 mm	Ø 225 mm	60 mm	20,0 mm
Ø 250 mm	60 mm	20,0 mm	Ø 250 mm	60 mm	20,0 mm

3.0. The technological process

3.1. Surface preparation

Remove the dust, dirt, construction waste, mortar and fat from the plastic pipe surface around the entries.

3.2 Application of the PS pipe cuff

3.2.1. Discrete pipes running through the ceiling.
In case of pipes running through the ceiling are the fire protection tasks dual:

- to close the opening between the pipe and the ceiling-wall with fireproof sealing;
- to apply a fire protection *cuff* on the plastic pipe under the ceiling, which closes down the pipe through its swelling load in case of fire, and so it stops the flow in the pipe.

The application of the fire protection pipe cuff begins with opening the already assembled cuff, by folding out the tab or tabs from the cope. Put the open cuff on the pipe like an armlet on the arm, and push it up just under the lower side of the ceiling or the fire protection sealing (or put it up before the fire protection sealing), and tighten it to the pipe by folding back the open tabs – in case the measurements of the pipe do not agree totally with the cuff-sizes, then use the bigger size for ade-

quate application. In this case, a little gap remains between the swelling inlay of the pipe cuff and the pipe wall, but this does not effect the fire sealing effect.
Fasten the horizontally splayed cuff-tabs, which slick on the lower side of the ceiling with metal dowel to the ceiling. It is done usually by drilling a Ø 6 mm hole into the concrete ceiling with a rock-driller, and fastening the tabs with pin or screw dowels the ceiling. The cuff can also be installed before application of the concrete, so the cuffs are placed at the of the ceiling. At pipe entries, place cuffs on both sides of the wall in the above described way.

3.3 Application of the PS 25 pipe cuff

3.3.1. Discrete pipes running through the ceiling.

PS-25 should simply be reeled on the plastic pipe on the bottom side of the ceiling and then it should be fixed by the self –adhesive strip not to fall down and it should be pushed into the remaining gap in the way that the bottom edge of the cuff should be at same level with the ceiling surface. Then in this position it should be fixed with spacers. This fixation is temporary the fixation with mortar means a devinitive one.

In the case of walls PS 25 should be put on both sides ont he wall onto the plastic pipe on the above manner.

4.0. Controlling and examination tasks

The expert material choice is performed by the work leader or the person controlling the construction.
For the expert shipping is the person controlling the construction responsible.
For workmanlike storing is the central warehouse-leader responsible, for the materials transported to the construction is the present overseer liable.

4.1. Control of the implementation:

Things to do before application:

- take stock of the amount of plastic pipes according to diameter; (Bear in mind that the double of cuffs is needed at wall entries)
- check the cleanness of the pipes, and prescribe the adequate cleaning method.
- make the materials and tools necessary for the cuff-application available.;

Things to do after application:
Check the expert installation and stable fixation of the pipe cuffs.

In summary: the control steps in the different work-phases.
1. Surface preparation
   – check the cleanness of the surface
2. Implementation
3. Having a look at the work, check the mechanical stability.