



## Architecture, Building and Construction

# Press-Fit Tube As Cable Channels



Location	Milan
Environment	Urban
Fabrication process	Tube making, press-fitting
Grade/surface	304 (tube), 316L (fittings)
Dimensions	Tube 108 and 74.1 mm; wall thickness 2 mm
Manufacturer	Eurotubi Europa Spa, Nova Milanese (MB), Italy
Date of completion	2015
Material Supplier	Aperam Stainless Services and Solutions Tubes Europe, Ancerville, France
Source of information	Centro Inox, Milan, Italy

Stainless steel press-fitting systems have a long history of successful use for industrial and domestic plumbing, heating and gas installations. However, there is more use for them than conveying liquids or gas. In the construction of a temporary footbridge used by thousands of visitors as the main access route to the 2015 World Exhibition in Milan, they were used as cable channels. In total, 7,000 m of stainless steel tubes manufactured from type 304 were installed, requiring 2,100 press-fit joints, which were interconnected by fittings of grade 316L stainless steel. The rigid metallic design requires fewer anchor points than classic plastic cable channels. The elasticity of stainless steel and a series of expansion joints gave the installation the necessary flexibility to absorb the lateral movement of the 520 m-long steel structure, which could be up to 4 cm, depending on the load. Stainless steel tubes, in combination with the proven press-fit fitting technique, provide a practical and aesthetically pleasing solution wherever cables need to be protected mechanically against accidental damage and vandalism.