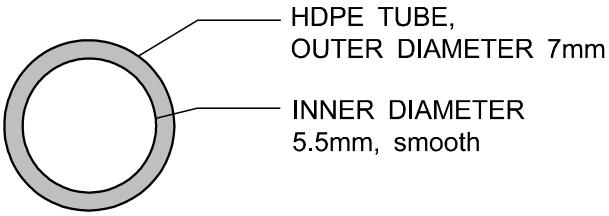
# fibreflow™ Blown Fibre
# Primary tube 7/5.5mm




## PRODUCT DESCRIPTION

Polyethylene tube designed as a fibre or cable pathway. The tube can itself be blown into a waiting duct either alone or as a collection of similar tubes. Each tube has performance as described below.

**TUBE**, as extruded (prior to winding onto drum)

1. Material is HDPE (high density polyethylene)
2. Mass of tube approx 14g/m
3. Extruded from 100% virgin material (no re-used PE content)
4. Outer diameter minimum 6.9mm, maximum 7.1mm. Inner diameter 5.4 to 5.6mm
5. Ratio of minimum to maximum wall thickness at any point shall exceed 0.9
6. All tube shall push-fit into designated 7mm connectors.
7. Identification: The tube material may be tinted with a small amount of colour to aid identification.
8. Min bend radius: 110mm above 5°C. 150mm below 5°C

### PRINTING

The tube shall have incremental length markings at intervals of 1 metre.

### DRUM WINDING

On the delivery drum, tube shall be wound in definite and orderly layers.

### TESTS ON FINAL PRODUCT

**1. Flexibility** Use test method IEC 60794-1-2-E11. (10 turns) around a mandrel of 100mm diameter for 30 minutes. There shall be no damage to the tube. A ball or probe of diameter 5mm shall pass through the tube, on the mandrel, without becoming stuck.

**2. Shape** After winding onto delivery drum, all tube shall comply with the following ovality limit. Maximum outer dimension shall not exceed 7.4mm

**3. Pressure** All tube shall withstand, under water, 17 bar air pressure for 2 hours without leaks or damage.

**4. Crush** Use test method IEC 60794-1-2-E3, tube sample 250mm long. Load with 800N (80kg) for 60 seconds then remove load. Residual deformation shall not exceed 15% measured within 1 minute of unloading. There shall be no splitting nor permanent damage to the tube.

**5. Ice Withstand** Three 1.5m samples of tube filled with water, sealed both ends and left at -15°C for 10 hours shall not burst or split. After this, the ice shall be left to melt, using no applied heat. The tubes shall be emptied of water and shall withstand air pressure of 17bar for 15 minutes under water with no leaks.

**6. Stress Crack** Five samples of tube to be tested to the ESCR Environmental Stress Crack test of BS 6469 Method 2, using Teepol GD53 or equivalent at 50°C. There shall be no failure before 500 hours.