Denso®

LEADERS IN SEALING TECHNOLOGY

# SEALING OF SERVICE ENTRIES AND DUCTS

PROTECTION FROM GAS ESCAPE AND WATER INGRESS IN DUCTS & SERVICE ENTRIES

## Product & Application Data

### Introduction

### The need for service entry and duct seals

It is possible for gas to escape from buried gas pipes into the surrounding soil. This gas could diffuse to the surface and disperse harmlessly. alternatively, it could travel along the trench and find its way via ducts or unsealed service entries into buildings where it could cause explosions.

Where a service e.g. gas or water pipe or cable enters a building below ground, it must pass through a sleeve which is fixed into the wall. The space between the service and sleeve must be sealed such that it is permanently gas tight and capable of accommodating movement. This ability to permit movement is necessary to allow for soil compaction, settlement or subsidence. It is important that the seal withstands water pressure and is not destroyed by vermin.

Duct seals are similar. Telephone or electricity supply cables are commonly run in ducts. Gas can accumulate in these ducts and seep[ into exchanges, sub stations, switchrooms etc. Therefore it is necessary to make an effective seal in the space between the cable and the duct. Spareways without cables also have to be sealed. Ducts below ground can also fill with water and this too would enter the exchange or sub-station. The seal has to prevent this. Water may exert considerable pressure and in a basement a two metre head is quite possible.

## Densyl Mastic:

Densyl Mastic is a self supporting non-setting mastic for waterproofing and for sealing service entries and ducts against entry of gas. It has been evaluated by British Gas and found suitable for sealing the annular space between carrier pipes and sleeves where services enter buildings below ground level.
**Densyl Mastic** is widely used for moulding around irregular profiles such as flanges, mechanical joints and valves to provide a contour suitable for wrapping with anti-corrosion tapes.

**Description:**
Soft mouldable mastic based on saturated petroleum hydrocarbons, inert mineral fillers and organic fibres. Preformed strip 330mm long with round or triangular profile or in 3 kilos blocks.

**Field of Application:**
Densyl Mastic strips can be rapidly applied to provide an effective gas and water tight seal capable of accommodating movement due to settling, subsidence or vibration (where ducts are wet or a substantial head of water could form, Densoseal 16A should be used).

T&D

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# Denso Products for the Sealing of Service Entries and Ducts

## Densyl Mastic (continued)

### Method of Application
Densyl Mastic is packed by hand into the annular space between the service or carrier pipe and the rigid sleeve which is fixed to the wall. The mastic should be packed into the annulus to a depth at least equal to the diameter of the sleeve. Surfaces should be dry and free from loose rust, scale, dirt or previous sealants.

### Properties
Densyl Mastic adheres to all metal surfaces, PVc, polythene, and glazed earthenware. Unaffected by natural gas and water. Accommodates movement. Withstands at least 14kPa (2lb/in$^2$) air pressure for a minimum of 15 minutes. Withstands up to 5 kPa (0.5metre head) water pressure for 30 minutes.

| | |
|---|---|
| Colour: | green/brown |
| Specific Gravity: | 1.39 |
| Specific Volume: | 720cc/kg |
| Application Temperature Range: | 0 to70°C |
| Service Temperature Range: | -20 to 90°C |

| | Extruded Strips | | Blocks |
|---|---|---|---|
| | Round | Triangular | |
| Weight: | 0.9kg/strip | 0.6kg/strip | 3kg |
| Profile: | 50mm diameter | 50mmx50mm x70mm | - |
| Length | 330mm | 330mm | - |
| No per carton: | 12 | 20 | 6 |

## Densoseal 16A:
Densoseal 16A is a self supporting non-setting mastic which has been developed for sealing cable ducts and conduits against gas or water. It has British Telecom type approval and meets the requirements of British Gas for sealing services.

### Description
Firm fibrous mastic based on polybutene, mineral fillers, organic fibres and water displacing materials.
Preformed strip.

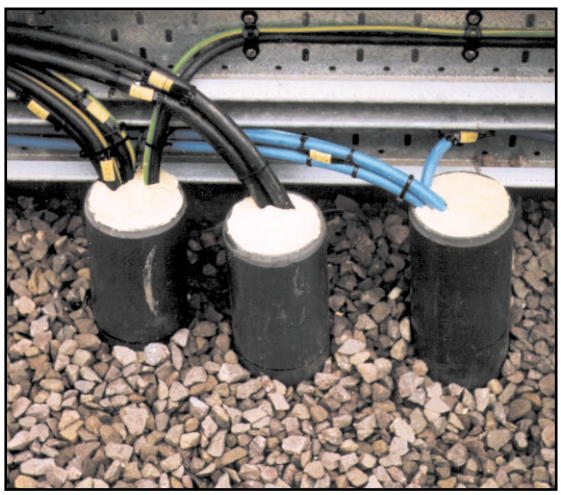
### Field of Application
Gas and water can accumulate in underground ducts such as those carrying telephone or electricity supply cables. Where ducts terminate inside buildings, manholes or chambers they must be sealed against gas and water. Densoseal 16A is especially suitable for those applications where ducts are wet or liable to fill with water.

### Method of Application
Densoseal 16A is packed into the ends of the duct by hand and moulded firmly around cables and against the duct ensuring there are no gaps or fissures. The mastic should be packed to a depth at least equal to the diameter of the duct. Surfaces should be free from loose rust, scale, dirt or previous sealants.

### Properties
Densoseal 16A adheres to conduit materials such as steel, glazed earthenware and unplasticised materials such as lead, polythene or PVC. Unaffected by natural gas and water. Accommodates movement. Adheres to wet surfaces. Withstands at least 20kPa (2 metre head) water pressure for a minimum of 30 minutes.

| | |
|---|---|
| Colour: | off white |
| Specific Gravity: | 1.73 |
| Specific Volume: | 578cc/kg |
| Application Temperature Range: | 0 to35°C |
| Service Temperature Range: | -15 to 100°C |

| | Extruded Strips |
|---|---|
| Weight: | 1kg |
| Dimensions | 330mm x 40mm x 40mm |
| No per carton: | 8 |



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