

## LOCKING COLD AIR FLOW AWAY FROM HOT AIR

**CABLE & AIR MANAGEMENT ACCESSORY** 

Two issues are of significant importance to separate Cold and Hot Air via any grommet:-

- Cold air pressure should not lift the brush strip seal and escape through the gland
- Hot air should not be drawn downwards, below the tile and into the cold air flow

Note: IPACK 2001-15728ASME advises that grommet/tiles near the CRAC unit often experience negative air flow from inside the rack, pulling hot air down into the cold air stream.

BrushGland Grommets have been laboratory tested and their brushes did not lift or flap until a large air pressure differential of 1500 pascals (0.44" water gauge) was reached.

Under-floor static pressure is commonly 6 pascals (0.025" water gauge) or less.

BrushGland Grommets substantially exceed the common static pressure with a high safety factor and will keep the Cold Air in.

## **Unique Brush Gland**

The Cannon brush gland is pre-stressed to resist air pressure. The patented system provides firm support to both ends of the brush; the brush tips press down onto the radiused sides of the grommet, acting like leaf springs. This imparts greater resistance to air pressure.









## **FOURTEEN DEGREES OF SEPARATION**

**CABLE & AIR MANAGEMENT ACCESSORY** 

# Seven Deadly Sins of Old Fashioned Grommets

1. Cables significantly distort the root of the brush, opening a large air leakage path, destroying the air blocking objective of the gland.



2. Sharp corners in the gland can corrupt data.



3. No cable strain / tie off capability so total weight of cable has to be man handled during install.



4. Power and data cabling are not reliably separated.



5. No visibility through gland adds complication.



6. No protection for cables against sharp cut tile edge.



7. Many types of old fashioned gland need to be on hand to cope with varying challenges.



# Seven Wonders of the

1. Cables pass tips of brush avoiding distortion and maintaining an effective air seal.



2. Big bend radii protects cables.



3. Tie off fingers take cable strain, easing effort and protecting cable & fibre.



4. Power and data are separated by an optional drop in Power/Data Partition.



5. Total "see through"\* capability eases install.



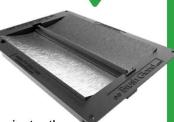
\*Brush is removable.



6. Radiused skirt protects cables from damage by sharp cut-edge of tile.



7. Just one **BRUSHGLAND** will satisfy all usual installation challenges reducing stock, space and cost.



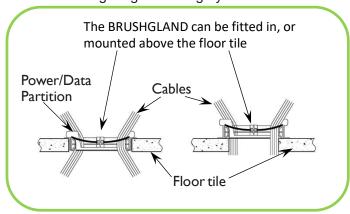
**BRUSHGLAND** can be instantly installed in drop-in, surface mount, or retrofitted around pre-cabled cut-outs in the tile.





**CABLE & AIR MANAGEMENT ACCESSORY** 

- The brush is "Quick-Fit" and Quick-Release removable, allowing access through the gland to under floor void
- The brush is mounted on a central bar so that the tips of the brush rest on the sides of the gland where the brush is not heavily distorted by cables
- Cables do not pass through the middle of the brush where increased distortion will occur
- This patented orientation of the brush dramatically improves air blocking and supports the brush to prevent brush sag over-time
- Bend radii and cable tie points around the edge, avoid data cable damage and simplify installation
- BRUSHGLAND can be either "surface mounted", "drop in" (into a cut out in the tile) or retro-fit around pre-installed cables, reducing the range of glands required to fit in a pre-cut tile
- The BRUSHGLAND has quick release features for instant separation of the frame when retro-fitting, so no tools are needed
- For Drop-in mode, the skirt of the gland protects data cables from sharp metal at the lower cut edges of the tile and provides bend radius at the lower and upper edges to protect data cable integrity
- An optional Data/Power Partition is available to separate power cable from data cable by the required amount, to protect against data corruption
- The separator bridge just drops in after large power connectors have been passed through the gland, so any size of pre-terminated connectors can be used
- Fibre optic cable can be introduced through the bridge to utilise the data separation space effectively. This maximises gland capacity without endangering data integrity



#### **BRUSHGLAND**

- Provides a higher level of air blockage when compared to other cabled grommets
- Is more protective of fragile data cable
- Separates power cable from data cable
- Is much more user-friendly
- Provides visual and physical access to the underfloor
- One BRUSHGLAND™ achieves all of the install needs i.e. Surface Mount, Drop-In or Retro-Fit

## It's common sense!

### **Specification BRUSHGLAND:**

- Cut-out size in floor tile: 270mm x 185mm (10 <sup>5</sup>/<sub>8</sub>" x 7 <sup>5</sup>/<sub>16</sub>")
- Fixing centres: 281mm x 195mm (11 <sup>1</sup>/<sub>16</sub>" x 7 <sup>11</sup>/<sub>16</sub>")
- Overall dimensions: 296mm x 210mm x 40mm (11<sup>3</sup>/<sub>4</sub>" x 8 <sup>1</sup>/<sub>4</sub>" x 1 <sup>9</sup>/<sub>16</sub>")
- Height above floor tile when fitted into floor tile:
  3mm (flange thickness) (1/8")
- Height above floor tile when fitted above floor tile: 40mm(1 <sup>9</sup>/<sub>16</sub>")
- Height of Power/Data Partition 'ears' (when fitted) above Floor Gland flanges:20mm (<sup>3</sup>/<sub>4</sub>")

#### **Frame Material:**

Glass filled Polyamide (Fire Resistant)

### **Power/Data Partition Material:**

Galvanized Steel (Hand fold)

Colour: Black

Order Codes	
Description	Part Code
BRUSHGLAND Assembly	NR178
Power/ Data Partition	NR178-5