KOLDLOK® INTEGRAAL Integral Raised-Floor Grommet
Model No. 1010

APPLICATIONS

Installation in *new* or existing raised floor tiles prior to the installation of racks or cabinets containing computer and communication equipment.

SPECIFICATIONS

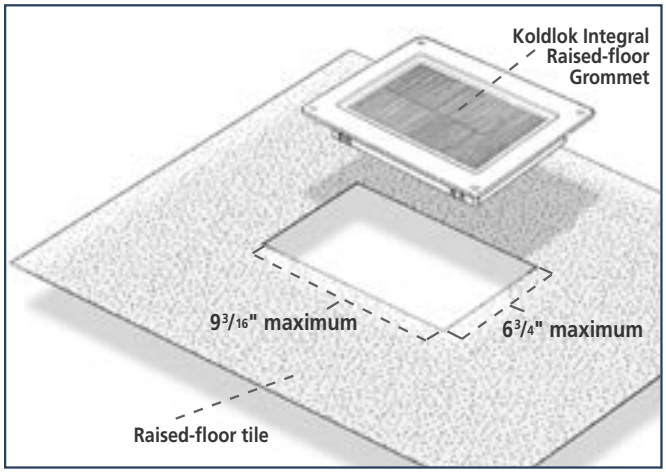
Grommet is inherently self-sealing using a multi-layer, overlapping, and interwoven, bypass airflow closure system consisting of:

- Two opposing overlapping arrays of 0.010" diameter upper filaments
- Two opposing arrays of 0.020" diameter lower filaments
- 1,560 interwoven filaments per lineal inch: 3,100 filaments per inch as opposing overlapping arrays

Grommet filaments are premium grade Nylon 6 ensuring bristle flexibility, compliance, and self-sealing recovery. Filaments are conductive with static dissipation properties.

Grommet and filaments safely bleed off any static build up on cables passing through the cable opening caused by high velocity airflow (triboelectric effect). Grommet is an integral part of the raised floor's static dissipation system providing 1 GigaOhm of resistance.

Grommet shall achieve 100% bypass airflow sealing in areas undisturbed by cable penetrations and 96% sealing effectiveness when penetrated by four 1/2" cables at a static pressure of 0.01 inches of water column (wg).



Grommet contains no loose or partially fastened parts, which can become separated, fall through the raised floor, tent, or be kicked out of position.

Grommet is a heavy duty, molded, high impact resistant polypropylene housing with a wide trim lip and to provide a bumper to inhibit equipment casters from falling through raised floor openings and to allow imprecise tile cutting.

Grommet metal components are anodized to resist corrosion and humidity and are assembled with positive fasteners that will not pull through the plastic. Grommet is installed using four (4) provided self-drilling sheet metal screws without requiring predrilling.

Grommet satisfies NFPA 75 Section 5-4.4 requirement by self-dressing the raw metal edges of raised-floor tile cable cutouts.

DIMENSIONS & TILE CUTTING SPECIFICATIONS

Overall size: 11" x $8^{1/4}$" x $1^{5/8}$"
Grommet usable cable opening size: 8" x 4"
Grommet total cable opening size: 8" x 5"*

Basic tile cutting dimensions for installation in a floor tile:

A. Interior tile mount $9^{3/16}$" x $6^{3/4}$"
B. Long edge tile mount $9^{3/16}$" x $7^{1/2}$"
C. Short edge tile mount $10^{1/8}$" x $6^{3/4}$"

*Ensures easy passage of cable heads and power connectors including a 100 amp Hubbell™ power plug (or equivalent 4.125" x 4.125" connector).

FEATURES

KoldLok is a permanent airflow sealing solution which will accept perpetual cabling† changes without requiring technician training, policing, or labor to cut, scribe, re-install, reposition, or modify any part of the grommet.

KoldLok is the best low cost solution for achieving the hardware air intake temperature and humidity conditions required for maximum reliability and performance by computer and communication manufacturers.

The KoldLok system of overlapping, offset, multi-layer, interwoven bypass airflow closures utilizing KoldFilaments™ guarantees sealing effectiveness. (U.S. Patent No. 6,632,999.)

KoldLok avoids unnecessary investments in additional cooling capacity* by reducing bypass airflow which increases both the effectiveness and useable capacity of existing cooling equipment.

KoldLok's 32 square inch useable cable area is sufficient to accommodate virtually all cabling requirements (typical cable fill cross sectional area is less than 5 square inches).

KoldLok's sealing effectiveness enables standardization on one size of tile cutout reducing cost and tile inventory.

†For a typical 10,000ft² computer room with 170 cable openings, preventing the 50,000 cubic feet per minute bypass airflow loss through unsealed cable cutouts is equivalent to recovering the output from five or more 20-Ton cooling units .

*It is estimated that, on average, 25% of all raised floor openings are re-worked quarterly.

Exploded view: KoldLok Integral Grommet

BACKGROUND

ELIMINATE BYPASS AIRFLOW

Unsealed cable openings allow 63% or more of bypass air losses in a typical computer room. Excessive bypass airflow will reduce under floor static pressure to as low as 0.01" of water column. This is much lower than the 0.025" required for cooling high heat densities (> 1 kW/rack or cabinet). Unmanaged bypass air results in vertical and zone hot spots and introduces significant cooling inefficiencies.

A CLEAR SOLUTION

The **KoldLok Integral Raised-Floor Grommet** automatically reseals raised-floor openings, permanently solving bypass airflow problems.

THE COMPANY

Triton Technology Systems, Inc. provides products and computer room environmental diagnostic and remediation services designed to increase cooling effectiveness. Our mission is to enable computer rooms to reliably achieve the optimum temperature and relative humidity conditions at the air intake of computer and communication equipment, as required by hardware manufacturers.

For more information, please visit us online at **www.koldlok.com** or call (505) 982.7800.