



Extended Raised-Floor Grommet

Model No. 4020 and 4010



APPLICATIONS

Installation in *new* or existing raised floor tiles, designed to fill long narrow, above floor, perimeter cutouts.

SPECIFICATIONS

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

3" Extended:

- One opposing overlapping array of 0.010" diameter upper filaments
- One opposing array of 0.020" diameter lower filaments
- 1550 filaments per lineal inch

6" Extended:

- One opposing overlapping array of 0.020" diameter upper filaments
- One opposing array of 0.036" diameter lower filaments
- 460 filaments per lineal inch

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 at static pressures up to 0.010 inches of water column. When penetrated by four 1/2" cables, sealing is 100% effective at the static pressure required to cool up to 3 kW/cabinet with a 95% sealing effectiveness at a static pressure of 0.50".

Grommet ships with custom adhesive mounting kit consisting of:

- Four 3M™ 4300 series single-coated, double-sided pressure-sensitive acrylic adhesive foam mounting tapes
- Eight 2.5mm Youngboard-C, conductive grade, cross linked polyethylene foam buttons for ESD dissipation

Grommet is a heavy duty, 6030 aluminum alloy, anodized black with two each 18 gauge cold rolled steel end caps. End caps are black ESD powder coated to ensure static dissipation.

Grommet metal components are anodized to resist corrosion caused by high humidity.

3" Filament No. 4010

Overall size: 24" x 6" x 1 1/4"

Grommet usable cable opening size: 22" x 2 1/2"

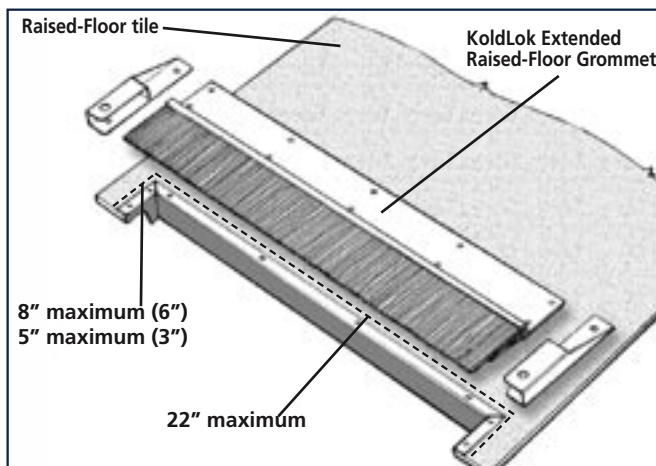
Grommet total cable opening size: 22" x 5"

6" Filament No. 4020

Overall size: 24" x 9" x 1 1/4"

Grommet usable cable opening size: 22" x 5 1/2"

Grommet total cable opening size: 22" x 8"



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 usable capacity of existing cooling equipment.

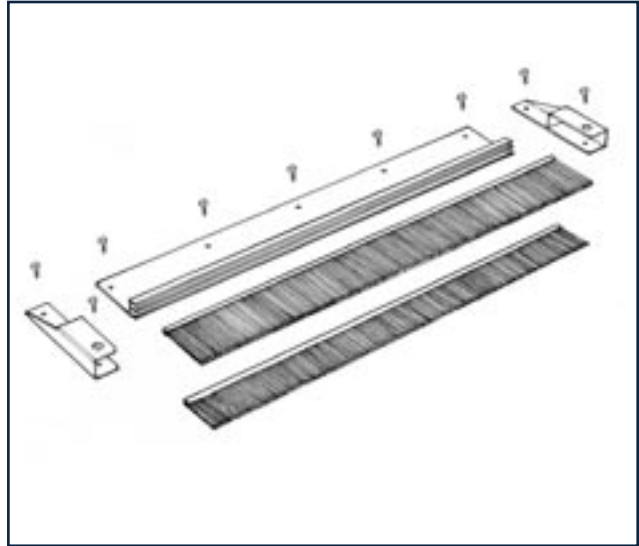
KoldLok's 55 - 120 (3" & 6" units) square inch usable cable area is sufficient to accommodate virtually all cabling requirements (typical cable fill area is less than 5 square inches, after plug has passed through).

KoldLok addresses oversized tile cutouts and raised-floor perimeter openings.

[†]It is estimated that, on average, 25% of all raised floor openings are re-cabled quarterly.

^{**}Filaments are premium grade Nylon 6. Filaments made of styrene, ABS or polypropylene fall below KoldLok product standards.

*For a typical 10,000ft² computer room with 170 cable openings, preventing the 49,000 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.



Exploded view: KoldLok Extended 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 underfloor 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 Extended 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. These are designed to increase cooling effectiveness without requiring any downtime. Our goal 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 recommended by hardware manufacturers.

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