



Surface Mount L & XL Raised-Floor Grommet

Model No. 2030 (L) Model No. 2040 (XL)



Model 2030 shown

APPLICATIONS

Installation in *active* raised floor data centers to seal cable openings beyond the opening size of a traditional surface mount grommet, without affecting operations.

SPECIFICATIONS

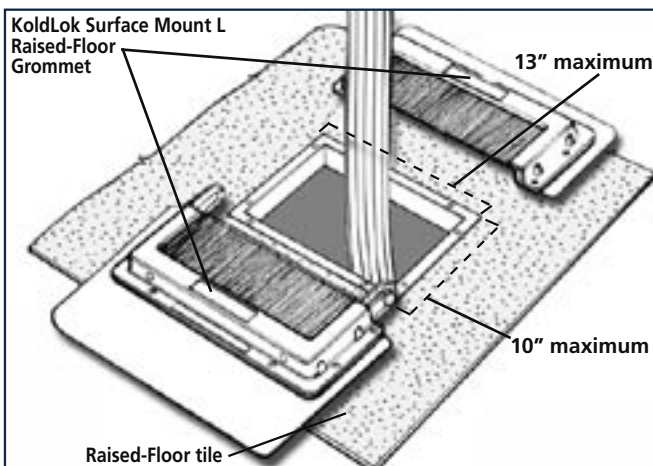
Grommet is inherently self-sealing using a multi-layer, overlapping, and interwoven, bypass airflow closure system consisting of:

- Two opposing overlapping arrays of 0.010" diameter upper filaments
- Two opposing arrays of 0.020" diameter lower filaments
- 3,100 filaments per cross sectional 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 0.10 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 96% sealing effectiveness at a static pressure of 0.10".



Grommet ships with custom adhesive mounting kit consisting of:

- One edge-mount cellular urethane foam strip
- Two sets of 3M™ 4300 series double-coated, single-sided, pressure-sensitive acrylic adhesive foam mounting tapes
- One set of 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 utilizes an engineered separating mechanism using high-grade polymer joiner bars which lock into position. The Grommet can be perpetually separated to facilitate recabling.

Grommet is a heavy duty, molded, high impact resistant polypropylene housing with a wide trim lip 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 caused by high humidity and are assembled with positive fasteners that will not pull through the plastic.

Grommet metal extensions are 20 guage, mild steel with a black esd powder coating, for greater safety in preventing accidental plenum penetrations.

Overall size L: 12" x 11³/₄" x 1¹/₈"

Overall size XL: 12" x 15" x 1³/₄"

Grommet usable cable opening size: 8¹/₄" x 4"*

Grommet total opening size L: 10" x 9³/₄"

Grommet total opening size XL: 10" x 13"

*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 equipment 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.

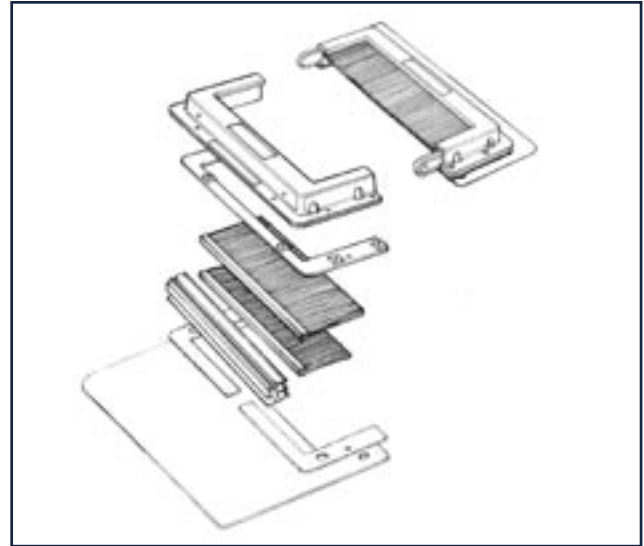
KoldLok's 33 square inch usable cable area is sufficient to accommodate virtually all cabling requirements (typical cable fill area is less than 5 square inches, after plug has passed through).

KoldLok's unique separating sections allow for installation during equipment operation resulting in absolutely no downtime.

[†]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 Surface Mount L 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 Surface Mount L & XL Raised-Floor Grommets** automatically reseal 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.