



# Cost Effective Cable Installations for Slab-on-Grade Projects

Save up to 40% by using LM-RDT I/O

- Cables that are suitable for both plenum air spaces, and intra-building wet environments can eliminate the need for transitions between cables with different flame ratings
- Leviton's LM-RDT I/O CMP cable is dual rated for CMP and CMX outdoor applications and has been rigorously tested to withstand water, sunlight, and extreme temperatures.
- Fillerless design enables best-in-class cable OD of 0.235" for higher density applications; plus smaller cables consume less materials during production, reduce job site waste, and improve pallet density for a more sustainable future
- Engineered with Leviton's award-winning FLX-1 advanced polymer jacket technology for improved flexibility and cable routing through tight pathways

## Assumptions:

- Typical project with approximately 20% of drops in conduit in or below slab
- Average run of 200 ft
- Calculations include all cable, fittings, and labor associated with installation

## Traditional Installation:

- Two separate per drop costs to account for gel-filled OSP cables and plenum cables
- Additional conduits due to larger OSP cable OD
- Additional labor and materials for transitioning between a flame-rated cable and an OSP cable

## Simplified Installation using LM-RDT I/O CMP:

- One per drop cost
- Fewer conduits due to reduced cable OD
- No additional labor or materials for transitioning between cable types
- Smaller BOM and faster installation

## Application:

Intra-building wet environment, slab-on-grade construction method

## Challenge:

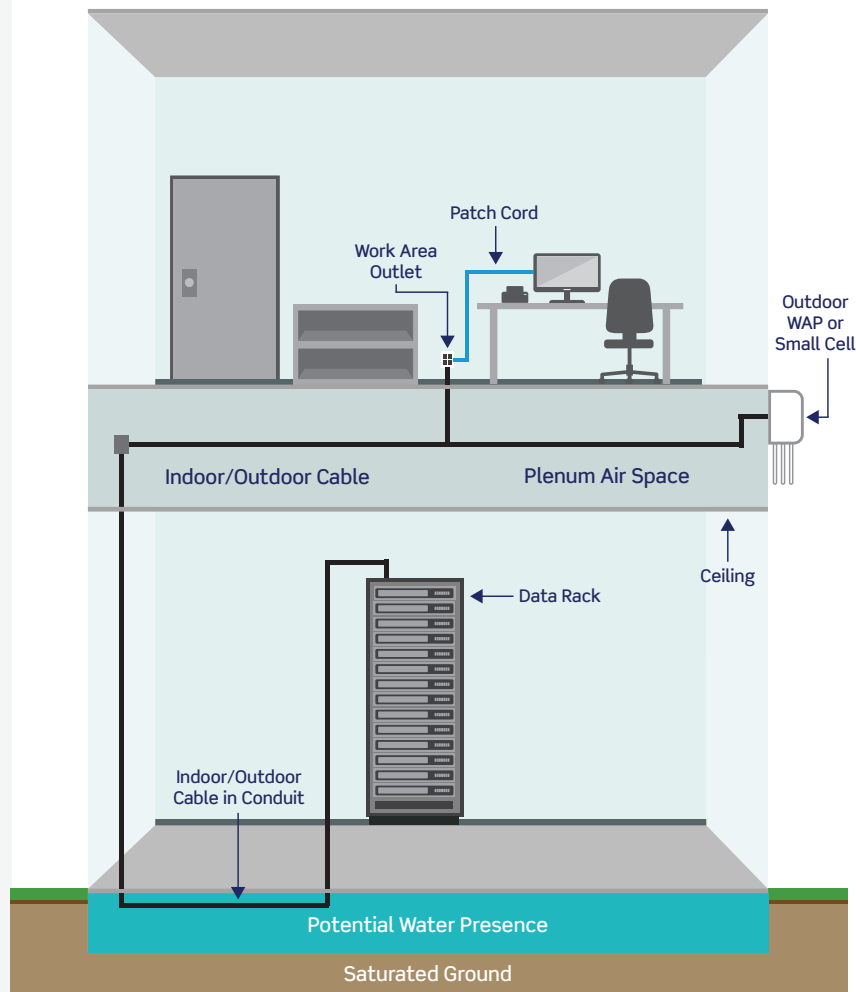
Slab-on-grade installations introduce the challenge of diverse cable requirements within a building footprint. One portion of the link segment may traverse a plenum air space while another runs through the conduit embedded in the concrete. Without a suitable cable for both environments, a transition point will be needed, which increases labor, materials, and costs.

## Solution:

Customers can save up to 40% on a typical project by using LM-RDT I/O and eliminating the need for a gel-filled cable and transition point. Leviton's LM-RDT I/O CMP cable is a flexible, gel-free, and water-resistant plenum rated cable designed for a wide range of applications. This cable has been pulled through flooded conduits, submerged under 1 meter of water, and subjected to real world installation stresses to assure its suitability for slab-on-grade applications. Because it is suitable for both plenum air spaces and most intra-building wet environments, the use of transition points can be minimized, maximizing Return on Infrastructure Investment (ROI™).

To assure that LM-RDT CMP I/O is suitable for slab-on-grade installations, a 135' link was subjected to three consecutive tests that simulated being installed in a slab-on-grade construction building. First, the cable was pulled through a dry EMT conduit. The same cable was then pulled through a flooded PVC conduit using Leviton's recommended installation method. Lastly, it was submerged under 1 meter of water for one month. After each step of the installation, the link was tested to the ANSI/TIA-568.2-D Category 6A permanent link specification. There was no observable degradation in performance at any phase of the test sequence.

Following the same test, a competitor's plenum rated indoor/outdoor cable showed significant degradation in the cable's jacket integrity at numerous points throughout the link during installation.



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