

The Leader in Cable Protection in Cellular Raceway Systems

N-R-G-FLOR+ In Floor Cellular Raceway System provides an ideal solution for wire and cable management for any project including casinos, government and educational buildings, recreation centers, libraries, and offices.

N-R-G-FLOR+ provides optimum structural strength for composite floor design loads and long clear spans without the use of shoring. Structure and wire management merge providing the lowest life cycle costs in the industry.

Cordeck's In Floor systems makes initial activation and future power and data upgrades or maintenance, hassle free, cost effective and highly efficient. Using combinations of cellular and non-cellular deck or 100% cellular layouts, the system provides wire and cable distribution to exact design specifications. Tapway trench header routes the power and data cables from service panels to the cellular raceway.

Tapway trench header is available in various widths including full, intermittent or bottomless and is internally divided for power and communication cabling. N-R-G-FLOR+ deck provides the industry's only Bend Radius Control feature from the tapway trench header to the activation devices. This feature exceeds the TIA/EIA minimum standards for bend radius, which provides assurance of optimum transmission performance for fiber optic and CAT-5/CAT-6 cable. All N-R-G-FLOR+ In Floor Cellular Raceway Systems are UL listed to U.S. and Canadian safety standards and provide ground continuity in accordance with electrical codes. UL fire classification designs are available for various hourly ratings.

N-R-G-FLOR+ Decking for Power & Communications



Tapway Trench Header Utilized to Feed Wire & Cables to N-R-G-FLOR+

FEATURES & BENEFITS

N-R-G-FLOR+ In Floor Cellular Systems

are designed for use with either steel frame construction or slab on grade applications.

Low operating costs increase asset value and are in place for the life of the building. They are sustainable not only during construction, but once installation is complete, there is no need to add extra materials. No maintenance required. The system is part of the structural steel framework and is covered in concrete below the finished floor.

Maximum secured protection. Wire and cabling are encased in the buildings structural steel framework.

Datacom connectivity options. Accepts industry standard and proprietary devices from a wide range of manufacturers to provide a seamless and aesthetically pleasing interface for voice data, audio applications at the point of use. A wide selection of data and bezel options available.

Protection and security provided by metal deck for wires and cables as well as optimum life safety for the building.

AutoCad and BIM model drawings

transferred electronically for concise design time collaboration.

Bundle Placement Plans are provided to ensure correct location of bundles during unloading and hoisting to steel framework.

Industry standard side laps. Blends with any generic type composite non-cellular Raceway.

Nine hole tapway trench header/Raceway intersections. Factory punched holes provide maximum capacity access without sacrifice in structural strength.

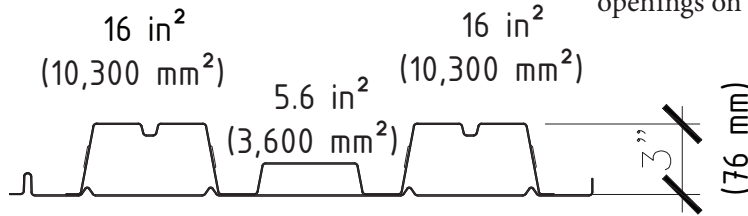
UL Listed presets install with snap in place feature. No screws or pop rivets required resulting in reduced labor costs.

N-R-G-FLOR+ CELLULAR RACEWAY

Profile: QL-GKX-63-24

Top Gauge Bottom Gauge

- 2 0 / 2 0
- 1 8 / 2 0
- 1 8 / 1 8
- 1 6 / 1 8
- 1 6 / 1 6



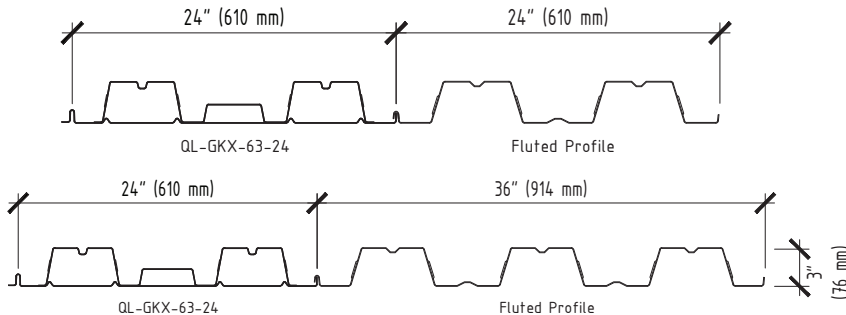
Description/Specifications

N-R-G-FLOR+ Cellular Raceway Systems custom manufactured to lengths up to 45' [13.761m] long with prepunched preset openings on min 24" [610mm] centers. Suffix indicates gauge of steel. Mid-span connections may be side-lap screwed, button punched or seam welded. Wire fill capacity charts included on page 5.

Available with G60 or G90 galvanized coating.

Note: Refer to N-R-G-FLOR+ Load Table Commentary for design loads & span capabilities

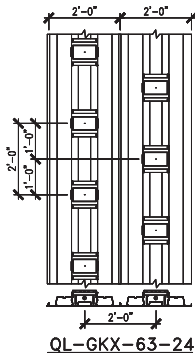
BLEND MODULES



Description/Specifications

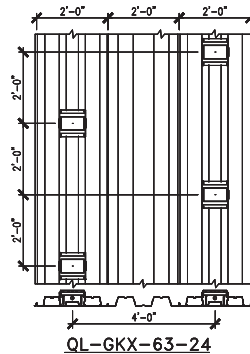
4'0" (1.219m) O.C. Blend - Fluted profile. 50% cellular. Non-cellular composite deck is provided to be used in conjunction with N-R-G-FLOR+.

5'0" (1.524m) O.C. Blend - Fluted profile. 40% cellular. Non-cellular composite deck is provided to be used in conjunction with N-R-G-FLOR+.



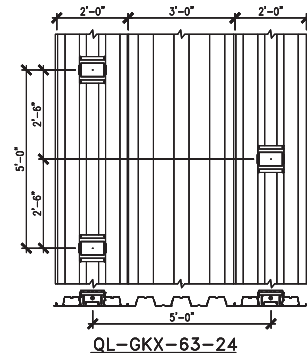
2' X 2' Preset Module
One preset outlet box
for every 4 sq. ft.

7 N-R-G-FLOR+ PRESET MODULE
SI SCALE: 1" = 1'-0"



4' X 4' Preset Module
One preset outlet box
for every 16 sq. ft.

8 N-R-G-FLOR+ PRESET MODULE
SI SCALE: 1" = 1'-0"



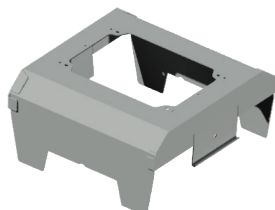
5' X 5' Preset Module
One preset outlet box
for every 25 sq. ft.

9 N-R-G-FLOR+ PRESET MODULE
SI SCALE: 1" = 1'-0"

Note: Other modules available to suit your particular design. Consult your Cordeck representative

TAPMATE 6 PRESET

TM6-2.50" [51MM]
TM6-3.00" [64MM]
TM6-3.25" [76MM]
TM6-3.50" [83MM]

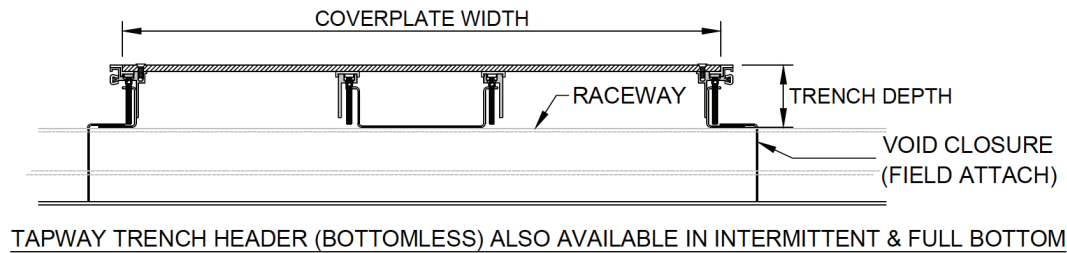


Description/Specifications

Tapmate 6 Preset - Galvanized steel, one-piece construction, field installed. Snap in installation with lock in feature. No screws or rivets needed. Mudcap included. Large internal capacity accommodates power and communications devices.

TAPWAY TRENCH HEADER

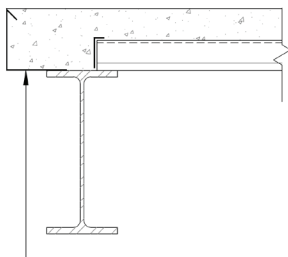
The primary feeder system for the Cellular Raceway System is Tapway trench header. The Tapway trench header is typically furnished as a bottomless product to facilitate feeding the power and data into the cellular deck raceway. Roller leveled cover plates 1/4" [6.4mm] are held in place with stainless steel screws. 3/8" [9.5mm] covers are available.



Note: The placement of the Tapway trench header will interrupt the structural continuity of the composite floor slab. Due to this interruption, the steel deck must carry the entire load of the floor at these locations. Additional supports may be required for the floor system at the Tapway trench header locations. Cordeck provides design assistance for the spacing of the supports, if required.

TAPROUTE SYSTEM TYPICAL CONSTRUCTION DETAILS

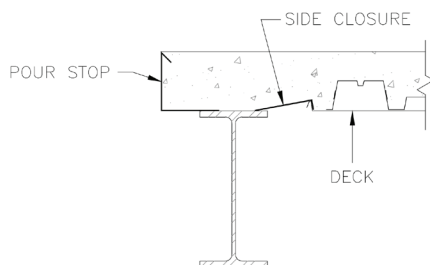
DECK SIDE VIEW



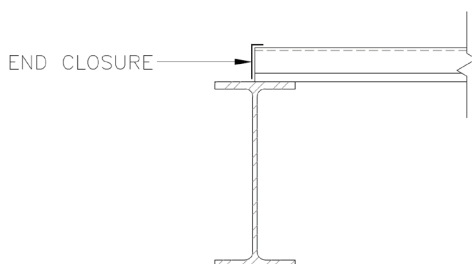
POUR STOP — 10, 12, 14, 16, 18, AND 20 GAGE

Pour Stop

Used to frame floor perimeter and large floor openings. Furnished in 10' [3.05m] lengths.



DECK SIDE VIEW



Side Closure

Used to close space between floor deck and girder. Furnished in 10' [3.05m] lengths .

End Closure

Used to close off end of decking prior to concrete pour. Furnished in 10' [3.05m] lengths.

RACEWAY WIRE FILL CAPACITIES - POWER

	WIRE SIZE AWG	14	12	10	8	6	4
Diameter	Inches	0.111	0.13	0.164	0.216	0.254	0.324
	Millimeters	2.8	3.3	4.1	5.4	6.4	8.2
Area (IN ²)	Square Inches	0.01	0.013	0.021	0.037	0.051	0.082
	Square Millimeters	6.5	8.4	13.5	23.9	32.9	52.9
N-R-G-FLOR+® (5.6 SQ. IN. [3613 SQ. MM])	40% Fill	231	168	106	61	44	27

RACEWAY WIRE FILL CAPACITIES - COMMUNICATIONS

		Twisted Pair		Telephone			Coaxial			Shielded Twisted Pair			Fiber Optics			
		4-Pair, Cat 5E	4-Pair, Cat 6E	2-Pair, 24 AWG	4-Pair, 24 AWG	25-Pair, 24 AWG	RG58/U	RG59/U	RG6/U	Type 1	Type 2	Type 3	2-Strand	4-Strand	6-Strand	Fiber Zip Cord
Diameter	Inches	0.220	0.250	0.140	0.190	0.410	0.195	0.242	0.270	0.390	0.465	0.245	0.180	0.190	0.210	0.110
	Millimeters	5.6	6.4	3.5	4.8	10.4	4.9	6.1	6.8	9.9	11.8	6.2	4.6	4.8	5.3	2.8
Area (IN ²)	Square Inches	0.038	0.049	0.015	0.028	0.132	0.03	0.046	0.057	0.119	0.170	0.047	0.025	0.028	0.035	0.010
	Square Millimeters	24.5	31.7	9.7	18.1	85.2	19.4	29.7	36.8	76.8	109.7	30.3	16.1	18.0	22.6	6.5
N-R-G-FLOR+® (16.0 SQ. IN. [10323 SQ. MM])	40% Fill	168	130	415	226	48	214	138	110	52	37.000	134	250	226	184	672.000

Note: Wire diameters can vary depending on manufacture. Verify diameter and adjust fill capabilities as required.

FIREPROOFING

N-R-G-FLOR+ In Floor Cellular Raceway Systems are structural elements of the floor system and become a part of the fire resistance of the floor system. In most cases, the floor system requires the direct application of the fireproofing material to the underside of the deck. Depending on the type of fireproofing material, deck type, and activation kit used, the thickness of the fireproofing will vary. Typically, thicknesses range from 3/8" (9.5mm) to 1-1/4" (32mm). The thickness required can be determined from the current Underwriters Laboratories Fire Resistance Directory. These are typical for use in steel frame construction and apply to the entire cellular floor assembly, not individual components. For other fire-rated design assemblies, visit UL Online Certification Directory at www.ul.com or contact your local sales representative.

SERVICE FITTINGS

A wide variety of service fittings are available to meet many applications. See Tapmate 6 Service Fittings Literature.



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