SECTION 09 69 33

LOW-PROFILE FIXED HEIGHT ACCESS FLOORING

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\*\* NOTE TO SPECIFIER \*\* FreeAxez LLC ; Cabling distribution system.  
This section is based on the products of FreeAxez LLC , which is located at:1805 Underwood Blvd.Delran, NJ 08075Toll Free Tel: 888-747-8515Tel: 856-764-0400Fax: 856-764-0700Email: [request info (webrequest@freeaxez.com)](https://arcat.com/rfi?action=email&company=FreeAxez%252BLLC%252B&message=RE%253A%2520Spec%2520Question%2520(09693faz)%253A%2520&coid=51027&spec=09693faz&rep=&fax=856-764-0700)  
Web: <http://freeaxez.com>   
 [ [Click Here](https://arcat.com/company/freeaxez-llc-51027) ] for additional information.  
For more than 25 years, FreeAxez has led the industry in developing new low profile access floor systems that accommodate changing technology and adapt to future changes quickly. FreeAxez is widely recognized as the premium developer, innovator and manufacturer of adaptive cabling distribution systems. With a proven system of products, FreeAxez is continuously expanding and refining its product offerings to meet the needs of today's and tomorrow's integrated high-performance buildings. This ' can do' approach to demanding projects and commitment to stay ahead of industry's evolving needs is what FreeAxez's clients depend on.  
All our products are manufactured in the United States allowing short lead times and accessible technical support.

1. GENERAL
   1. SECTION INCLUDES
      1. Adaptive Cabling Distribution Access Flooring:

\*\* NOTE TO SPECIFIER \*\* FreeAxez manufacturers and supplies the following adaptive cabling distribution systems and also the corresponding low-profile fixed height access flooring to be used with the cabling systems. Note the access flooring can also be used for purposes other than cabling systems.

* + 1. Delete items below not required for project.
       1. Field-installed branch circuit wiring.
       2. Factory provided quick connect cable whips.
       3. Modular manufacturing wiring systems.
    2. Low-profile fixed height access flooring.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 30 00 - Cast-in-Place Concrete (03 30 00) - Cast-In-Concrete.
    2. Section 03 35 00 - Concrete Finishing (03 35 46) - Concrete Finishing.
    3. Section 09 65 19 - Resilient Tile Flooring (09 65 19) - Resilient tile Flooring.
    4. Section 09 68 13 - Tile Carpeting (09 68 13) - Tile Carpeting.
    5. Section 26 05 00 - Common Work Results for Electrical (26 05 00) - Common Work Results for Electrical. Electrical connections and grounding.
    6. Section - (26 05 33) - Raceways and Boxes for Electrical Systems.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. American Disabilities Act (ADA).
    2. American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE):
       1. ASHRAE 90.1 - Energy Standard for Buildings Except Low-Rise Residential Buildings.
    3. ASTM International (ASTM):
       1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
    4. GreenSpec - Green Building Design and Products for Sustainable Construction.
    5. International Association of Plumbing and Mechanical Officials (IAPMO):
       1. IAPMO Uniform Evaluation Service.
    6. International Building Code (IBC).
    7. International Standards Organization (ISO):
       1. ISO 9001 - Quality Management System.
    8. National fire Protection Association (NFPA).
    9. Underwriters Laboratories (UL).
    10. United States Green Building Council (USGBC).
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data:
        1. Manufacturer's data sheets on each product to be used.
        2. Preparation instructions and recommendations.
        3. Storage and handling requirements and recommendations.
        4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern and color.
    2. Shop Drawings: Include details of materials, construction and finish. Include relationship with adjacent construction.
    3. Delegated Design: Customized installation plans coordinating power, data, AV and furniture to maximize the Gridd access floor system's advantages.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
     3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
       1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
       2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
       3. Retain mock-up during construction as a standard for comparison with completed work.
       4. Do not alter or remove mock-up until work is completed or removal is authorized.
  1. PRE-INSTALLATION CONFERENCE
     1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
     2. Protect from damage due to weather, excessive temperature, and construction operations.
  3. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
        1. Components to be Installed: Stored at the same ambient temperature and humidity as the installation area for 24 hours.
  4. WARRANTY
     1. Manufacturer's standard limited warranty unless indicated otherwise.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: FreeAxez LLC , which is located at:1805 Underwood Blvd.Delran, NJ 08075Toll Free Tel: 888-747-8515Tel: 856-764-0400Fax: 856-764-0700Email: [request info (webrequest@freeaxez.com)](https://arcat.com/rfi?action=email&company=FreeAxez%252BLLC%252B&message=RE%253A%2520Spec%2520Question%2520(09693faz)%253A%2520&coid=51027&spec=09693faz&rep=&fax=856-764-0700);Web: <http://freeaxez.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
  1. PERFORMANCE AND DESIGN REQUIREMENTS
     1. Standards Compliance: Meets the requirements of the following.
        1. ADA.
        2. ASHRAE 90.1.
        3. ASTM E84:
           1. Class Rating: A.
           2. Flame Spread Index: 25 or less.
           3. Smoke Development Index: 75 or less.
        4. IAPMO Uniform ES: Current evaluation report holder. Report Nos. ER518 and UEL 5028.
        5. International Building Code - 2018, 2015, 2012 and 2009. (2017 LABC).
        6. ISO 9001:2015.
        7. Listed: UL and ULc. UL Report No: E238565.
        8. Listed: GreenSpec.
        9. USGBC.
        10. Seismic Performance for FreeAxez Standard and Reinforced Gridd Systems:
            1. Comply with ASCE/SEI 7 Chapter 13.
            2. Certified by shake table testing in accordance with AC156 and meet requirements for special seismic certification of UBC-1997, IBC-2015, CBC 2013, ASCE 7-16 with the following Seismic Design Criteria:

Importance Factor: 1.5. SDS: 2g. Ss: 3g. z/h: 1.

Systems Are Qualified for the Following Seismic Parameters:

Seismic Design Category (SDC): A, B, C, D, E, and F.

Occupancy Categories: I, II, III, IV, and Site Classifications A, B, C, and D.

* + - * 1. All load-carrying units such as wall systems shall be anchored directly to the existing structure so as to resist design seismic loads. Gridd installation requires anchorage of load carrying units directly to existing structure with engineering per local code.
    1. Live Load Rating:
       1. Standard:
          1. Concentrated: 2000 lbs (907 kg); 30 x 30 inch (762 x 762 mm).
          2. Uniform: 100 psf (4.8 kPa); greater than 30 x 30 inch (762 x 762 mm).
       2. Reinforced:
          1. Concentrated: 3000 lbs (1361 kg); 30 x 30 inch (762 x 762 mm).
          2. Uniform: 250 psf (1.2 kPa); greater than 30 x 30 inch (762 x 762 mm).
       3. Maximum Deflection at Maximum Allowable Live Loads: Less than 0.15 inches (3.8 mm).
    2. Acoustics: Design features eliminating footfall and sound resonation 3.8.
    3. Fabrication Tolerances:
       1. Overall Component Size: Plus or minus 0.015 inch (0.38 mm).
       2. Component Flatness: 0.02 inch (0.5 mm).
    4. Flexibility:
       1. Additions, relocations and modifications require simple execution. Modules shall interlock and the system shall be gravity restrained.
       2. Cable channels shall be accessible without tools and shall allow for future cable access, installation, and modification.
       3. Allows creation of custom power distribution layouts using preconfigured electrical components which install and work seamlessly with the Gridd floor.
    5. Electrical: See also "Examination" Article in PART 3 of this specification.
       1. The low-profile access floor is not part of the grounding system, and is not intended to enclose splices or other types of wiring that are required to be enclosed in raceway as defined in the NEC, Art. 100. All wiring and cabling installed under the floors must conform to the applicable sections of the National Electrical Code (NEC) in effect.
       2. Cable Capacity:

\*\* NOTE TO SPECIFIER \*\* More than sufficient for any office or computer room. Delete the Gridd system not required.

* + - * 1. Gridd.40, 1.6 inch (40 mm) High: Accommodates 84 CAT 6 cables every 15 inches at 80 percent capacity.
        2. Gridd.70, 2.75 inches (70 mm) High: Accommodates 106 CAT 6 cables every 15 inches at 80 percent capacity.
      1. Grommets: Provided in base units, channel plates and corner plates. No cutting and drilling is required.
      2. Wire Connectors and Electrical Outlet Boxes: Built into system. Must accommodate other brand outlet service boxes.
    1. Installation:
       1. Subfloor Surface Quality- Gridd shall accommodate subfloors conforming with the manufacturer's minimum flatness and levelness requirements.
       2. Elevation Changes-Installation is permitted on subfloors with a "moderately flat" classification per ACI. ADA compliant Ramps are available to accommodate floor elevations changes
       3. Circular Installations: Installation plans utilizing standard, manufacturer supplied border components are available to accommodate curved and/or irregular borders.
       4. Borders-Border and frame components are specified on installation drawings and provide an appropriate transition surface between the edge of the Gridd floor and walls/boundaries.
       5. Reusable: The entire system is reusable. Components are gravity installed and can be removed by hand for relocation purposes. Ramps are mechanically fastened for stability.
    2. Gridd System Dead Load: The Gridd System contributes 5 lbs per sq ft (24.4 kg per sq m) of static load to the project.
    3. Floor Covering:
       1. The system requires an approved surface finish be installed prior to placing the system in use. Protect the unfinished/bare floor surface during construction and provide temporary protective covers as necessary to prevent damage and contamination of cable channels.
       2. Retaining Access to Cabling: Modular floor products such as carpet tile, luxury vinyl tile (LVT), and rubber tile, are essential to retain access to the cabling below.
          1. Fixed Flooring: Wood, stone, ceramic tile, and terrazzo can be installed over the raised flooring but flexibility for moves, adds, and changes are diminished.

The flooring system is often used where power is needed within hard surfaced floor locations but core drilling or trenching is not a reasonable solution.

* + - 1. Carpet Tiles: Any brand. Self-adhesive or pressure-sensitive glue to flooring-surface, holding tiles in place while allowing access to wiring channels.
      2. PVC Tiles: Any brand. Self-adhesive or pressure-sensitive glue to flooring-surface holding tiles in place while allowing access to wiring channels.
      3. Solid Wood Flooring Modules: Custom designed for Gridd flooring.
      4. Luxury Vinyl Tile (LVT): Must be a minimum of 0.20 inches (5 mm) thickness to avoid telegraphing of the Gridd surface texture.

\*\* NOTE TO SPECIFIER \*\* The Adaptive Cabling Distribution Access Flooring Gridd System by FreeAxez. can integrate with many power systems including three types of power systems by FreeAxez; traditional field wired branch circuit components, 2) branch circuits with factory wired Spin Lock Quick Connect components, and 3) pre-wired 50A modular bus and distribution systems. These power systems may be specified here using the following three articles or articles may be copied to appropriate sections in Divisions 26, 27 or 28. Delete the three following articles if specifying power systems in Division 26, 27 or 28. Otherwise delete the articles not required.

* 1. ADAPTIVE CABLING DISTRIBUTION ACCESS FLOORING - FIELD-INSTALLED BRANCH CIRCUIT WIRING
     1. Adaptive Cabling Distribution Access Flooring:
        1. Basis of Design: Gridd. An adaptive low-profile, fixed height raised floor cabling distribution system as manufactured by FreeAxez. Traditional field wired branch circuits terminating in floor boxes or desk mount components with receptacles and data/telecom/AV ports.

\*\* NOTE TO SPECIFIER \*\* Delete Gridd options not required. The Gridd options available may be further specified in the "Low-Profile Fixed Height Access Flooring Systems" Article in PART 2 of this specification

* + - * 1. Raised Height; Gridd.40: 1.6 inch (40 mm).
        2. Raised Height; Gridd.40, Reinforced: 1.6 inch (40 mm).
        3. Raised Height; Gridd.70: 2.75 inch (70 mm).
        4. Raised Height; Gridd.70, Reinforced: 2.75 inch (70 mm).
    1. Service Outlets and Wiring: Standard listed and labeled assemblies for recessed mounting flush with the top of floor components; for power, communication, and signal services; and complying with the following requirements:
       1. Structural Performance: Cover capable of supporting a 300 lbf (1334 N) concentrated load.
       2. Cover and Box Type: Hinged steel cover with opening for passage of cables when cover is closed and including frame and steel box or formed-steel plate for mounting electrical receptacles,communication jacks, and signal jacks.
       3. Receptacles and Wiring: Equip each service outlet with power receptacles to comply with the following requirements.
          1. Receptacle Type: Heavy-duty, simplex, two-pole, three-wire, grounding, 20 A, 125 V, NEMA 5-20R, unless otherwise indicated. Factory wired for connection to building power system.

Number of Receptacles for Service Outlet: One.

Number of Receptacles for Service Outlet: Two.

Number of Receptacles for Service Outlet: Three.

Number of Receptacles for Service Outlet: Four.

Number of Receptacles for Service Outlet: \_\_\_\_\_.

Number of Receptacles for Service Outlet: As determined by the Design Professional.

* + - * 1. Wiring Method: Factory wired for connection to building power system.
    1. Wiring Accessories:
       1. Grommet with twist-close cover.
       2. Underfloor electrical junction box for connection of branch circuit and feeder wiring.
       3. Cable management boots and sleeves to support the transition of cables into the adaptive cable distribution access floor.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. ADAPTIVE CABLING DISTRIBUTION ACCESS FLOORING - FACTORY PROVIDED QUICK CONNECT CABLE WHIPS
     1. Adaptive Cabling Distribution Access Flooring:
        1. Basis of Design: Gridd. An adaptive low-profile, fixed height raised floor cabling distribution system as manufactured by FreeAxez. Branch circuit with factory wired Spin Lock Quick Connect components.

\*\* NOTE TO SPECIFIER \*\* Delete Gridd options not required. The Gridd options available may be further specified in the "Low-Profile Fixed Height Access Flooring Systems" Article in PART 2 of this specification

* + - * 1. Raised Height; Gridd.40: 1.6 inch (40 mm).
        2. Raised Height; Gridd.40, Reinforced: 1.6 inch (40 mm).
        3. Raised Height; Gridd.70: 2.75 inch (70 mm).
        4. Raised Height; Gridd.70, Reinforced: 2.75 inch (70 mm).
    1. Service Outlets and Wiring: Standard listed and labeled assemblies for recessed mounting flush with the top of floor components; for power, communication, and signal services; and complying with the following requirements:
       1. Structural Performance: Cover capable of supporting a 300 lbf (1334 N) concentrated load.
       2. Cover and Box Type: Hinged steel cover with opening for passage of cables when cover is closed and including frame and steel box or formed-steel plate for mounting electrical receptacles, communication jacks, and signal jacks. Box supplied with factory-installed Spin Lock Quick Connect fittings.
       3. Receptacles and Wiring: Equip each service outlet with power receptacles to comply with the following requirements:
          1. Type of Receptacle: Heavy-duty, simplex, two-pole, three-wire, grounding, 20 A, 125 V, NEMA 5-20R, unless otherwise indicated.

Number of Receptacles for Service Outlet: One.

Number of Receptacles for Service Outlet: Two.

Number of Receptacles for Service Outlet: Three.

Number of Receptacles for Service Outlet: Four.

Number of Receptacles for Service Outlet: \_\_\_\_\_.

Number of Receptacles for Service Outlet: As determined by the Design Professional.

* + - * 1. Wiring Method, Home Runs: Flexible Metal Conduit containing three or four insulated, 12 AWG or 10 AWG, solid or stranded copper conductors, with pigtails for connection to electrical panel.
        2. Wiring Method, Interconnecting Cables: Factory-supplied Flexible Metal Conduit containing three or four insulated, 12 AWG or 10 AWG, solid or stranded, copper conductors with factory installed Spin Lock Quick Connect fittings.

Cable Lengths: As per project requirements.

* + 1. Wiring Accessories:
       1. Grommet with twist-close cover.
       2. Underfloor electrical junction box for connection of branch circuit and feeder wiring with or without factory-installed Spin Lock Quick Connect fittings.
       3. Cable management boots and sleeves to support the transition of cables into the adaptive cable distribution access floor.

\*\* NOTE TO SPECIFIER \*\* Each track can deliver up to 18,000 watts of power, current-monitoring with real-time data, at an efficiency rate that copper wire cannot match. Modular system includes floor boxes; desk mounts; circuit breaker boxes to power system furniture and/or wall receptacles; and relays for energy control. The system is completely recyclable, movable, and reusable. Delete article if not required.

* 1. ADAPTIVE CABLING DISTRIBUTION ACCESS FLOORING - MODULAR MANUFACTURED WIRING SYSTEM
     1. Adaptive Cabling Distribution Access Flooring:
        1. Basis of Design: Gridd. An adaptive low-profile, fixed height raised floor cabling distribution system as manufactured by FreeAxez. Pre-wired 50 A modular bus and distribution system with preconfigured plug-and-play components that may be easily reconfigured.

\*\* NOTE TO SPECIFIER \*\* Delete Gridd options not required. The Gridd options available may be further specified in the "Low-Profile Fixed Height Access Flooring Systems" Article in PART 2 of this specification

* + - * 1. Raised Height; Gridd.70: 2.75 inch (70 mm).
        2. Raised Height; Gridd.70, Reinforced: 2.75 inch (70 mm).
    1. Gridd Power Modular Power Components: Manufactured Wiring System consisting of 50 A power tracks, tap-off whips, floor box service outlets, desk mounted service outlets, and circuit breaker boxes.
       1. Wiring Method, Track Feed Modules: Type MC Cable with 8 AWG, 6 AWG and 4 AWG insulated stranded copper conductors.
       2. Wiring Method, Modular Electrical Components: Flexible Metal Conduit containing three or more insulated 12 AWG or 10 AWG solid or stranded copper conductors.
    2. Service Outlets and Wiring: Standard listed and labeled assemblies for recessed mounting flush with top of the floor components; for power, communication, and signal services; and complying with the following requirements:
       1. Structural Performance: Cover capable of supporting a 300 lbf (1334 N) concentrated load.
       2. Cover and Box Type: Hinged steel cover with opening for passage of cables when cover is closed and including frame and steel box or formed-steel plate for mounting electrical receptacles, communication jacks, and signal jacks. Box supplied with factory-installed whip and track connector.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - * 1. Spin Lock Quick Connect fittings are required.
      1. Receptacles and Wiring: Equip each service outlet with power receptacles to comply with the following requirements:
         1. Type of Receptacle: Heavy-duty, simplex, two-pole, three-wire, grounding, 20 A, 125 V, NEMA 5-20R, unless otherwise indicated.

\*\* NOTE TO SPECIFIER \*\* Delete number of receptacles options not required.

Number of Receptacles for Service Outlet: One.

Number of Receptacles for Service Outlet: Two.

Number of Receptacles for Service Outlet: Three.

Number of Receptacles for Service Outlet: Four.

Number of Receptacles for Service Outlet: \_\_\_\_\_.

Number of Receptacles for Service Outlet: As determined by the Design Professional.

* + - * 1. Wiring Method, Modular Power Components: Flexible Metal Conduit containing three or more insulated, 12 AWG or 10 AWG, solid or stranded copper conductors.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

Spin Lock Quick Connect fittings are required.

* + - 1. Overcurrent Protection: Equip each service outlet with single pole, two pole, or three pole, 15 A or 20 A, 125 V or 125/250 V circuit breakers as per project circuit requirements.
    1. Desk Mounted Service Outlets and Wiring: Standard listed and labeled assemblies for mounting to desks or millwork; for power, communication, and signal services; and complying with the following requirements:
       1. Box Type: Steel box plate for mounting electrical receptacles, communication jacks, and signal jacks. Box supplied with factory-installed whip and track connector.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - * 1. Spin Lock Quick Connect fittings are required.
      1. Receptacles and Wiring: Equip each service outlet with power receptacles to comply with the following requirements:
         1. Type of Receptacle: Heavy-duty, simplex, two-pole, three-wire, grounding, 20 A, 125 V, NEMA 5-20R, unless otherwise indicated.

\*\* NOTE TO SPECIFIER \*\* Delete number of receptacles options not required.

Number of Receptacles for Service Outlet: One.

Number of Receptacles for Service Outlet: Two.

Number of Receptacles for Service Outlet: Three.

Number of Receptacles for Service Outlet: Four.

Number of Receptacles for Service Outlet: \_\_\_\_\_.

Number of Receptacles for Service Outlet: As determined by the Design Professional.

* + - * 1. Wiring Method, Modular Power Components: Flexible Metal Conduit containing three or more insulated, 12 AWG or 10 AWG, solid or stranded copper conductors.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

Spin Lock Quick Connect fittings are required.

* + - 1. Overcurrent Protection: Equip each desk mount with single pole, two pole, or three pole, 20 A, 125 V or 125/250 V circuit breakers as per project circuit requirements.
    1. Circuit Breaker Box for Power Interface with Furniture and Wall Receptacle Power. Standard listed and labeled assemblies for recessed mounting flush with the top of floor components for powering wired furniture and complying with the following requirements:
       1. Structural Performance: Cover capable of supporting a 300 lbf (1334 N) concentrated load.
       2. Cover and Box Type: Hinged steel cover. Box supplied with factory-installed whip and track connector.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - * 1. Spin Lock Quick Connect fittings are required.
      1. Wiring Method, Modular Power Components: Flexible Metal Conduit containing three or more insulated, 12 AWG or 10 AWG, solid or stranded copper conductors.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - * 1. Spin Lock Quick Connect fittings are required.
      1. Overcurrent Protection: Equip each circuit breaker box with four single pole 15 A, 125 V, or three 20 A, 125 V, circuit breakers as per project circuit requirements.
    1. Wiring Accessories:
       1. Grommet with twist-close cover.
       2. Underfloor electrical junction box for connection of branch circuit and feeder wiring.
       3. Cable management boots and sleeves to support the transition of cables into the adaptive cable distribution access floor.

\*\* NOTE TO SPECIFIER \*\* Gridd, the award winning Raised Floor is an Adaptive Cabling Distribution System. Unlike traditional raised floors, Gridd's simple and revolutionary design is a raised floor system that easily adapts to the changing needs of a facility.

* + - 1. Gridd is a paradigm shift in thinking about raised flooring! Ask yourself what building design does not deserve easy, flexible access to power, voice, and data wherever needed and kept out of sight? Gridd is a Whole Building Design approach that integrates cable distribution technology throughout the entire building infrastructure. Gridd enables a building to adapt to inevitable technology changes, remain highly functional and operational, and saves money at every stage of its life cycle. Contact the manufacturer for more information.
  1. LOW-PROFILE FIXED HEIGHT ACCESS FLOORING SYSTEM
     1. Basis of Design: Gridd. An adaptive lo-profile, fixed height raised floor cabling distribution system as manufactured by FreeAxez.
        1. Raised Height; Gridd.40: 1.6 inch (40 mm).
        2. Raised Height; Gridd.40, Reinforced: 1.6 inch (40 mm).
        3. Raised Height; Gridd.70: 2.75 inch (70 mm).
        4. Raised Height; Gridd.70, Reinforced: 2.75 inch (70 mm).
     2. A patented all-steel, quick connect adaptive cable management distribution system consisting of a series of modular, removable, interchangeable steel base units, corner plates, channel plates, border units, and accessories that form an accessible under floor cavity to accommodate electrical and data services.

\*\* NOTE TO SPECIFIER \*\* All raw materials for the Gridd system originate from the United States.

* + 1. Construction Material; Standard and Reinforced Systems: Grade 40 ASTM A653 steel.
       1. Coating: G60 Galvanization.

\*\* NOTE TO SPECIFIER \*\* All Gridd components are manufactured in the United States. Delete Gridd components paragraph and component options not required.

* + 1. Gridd.40 Components:
       1. Base Unit: All steel, smooth surface with integral support legs.
          1. Dimensions (WxLxH): 14.6 x 14.6 x 1.6 inch (371 x 371 x 40 mm).
       2. Corner Plate (WxL): 7.8 x 7.8 inch (198 x 198 mm).
          1. Reinforced: Four posts added to each plate.

Posts (Dia x L): 0.625 x 1.6 inch (1.6 x 70 mm). 2011-T3 Aluminum.

* + - 1. Channel Plate (WxL): 11.7 x 5 inch (292 x 125 mm).
         1. Reinforced: Two posts added to each plate.

Posts (Dia x L): 0.625 x 1.6 inch (1.6 x 70 mm). 2011-T3 Aluminum.

* + - 1. Under Sheet: Polyethylene Foam. Substitutions are not permitted without prior written approval from Manufacturer.
      2. Border Components:
         1. Half Unit (WxLxH): 7.3 x 14.6 x 1.6 inches (185 x 370 x 40 mm).
         2. Quarter Unit (WxLxH): 7.3 x 7.3 x 1.6 inches (185 x 185 x 40 mm).
         3. Half Channel (WxL): 5.9 x 5 inches (149 x 127 mm).
         4. L-Type Border (WxLxH): 20 x 4.5 x 1.6 inch (500 x 115 x 40 mm).
         5. End Cover (WxL): 20 x 4.5 x 1.6 inch (500 x 115 x 40 mm).
         6. Reinforcing Band (WxLxH): 1.1 x 14.6 x 1.5 inch (28 x 370 x 38 mm).
         7. Trapezoid Plate (WxL): 1.4 x 8 inch (35 x 200 mm).
         8. L-Type Trapezoid Plate (WxL): 8 x 8 inch (200 x 200 mm).
      3. Optional Components:
         1. Slope 1:12 (WxLxH): 16 x 19 x 1.6 inch (406 x 483 x 40 mm).
         2. Slope 1:20 (WxLxH): 16 x 33 x 1.6 inch (406 x 840 x 40 mm).
         3. Internal 19 inch (WxLxH): 19 x 19 x 1.6 inch (483 x 483 x 40 mm).
         4. Internal 33 inch (WxLxH): 33 x 33 x 1.6 inch (840 x 840 x 40 mm).
         5. External 19 inch (WxLxH): 19 x 19 x 1.6 inch (483 x 483 x 40 mm).
         6. External: 33 inch (WxLxH): 33 x 33 x 1.6 inch (840 x 840 x 40 mm).
    1. Gridd.70 Components:
       1. Base Unit: Number FA-7001. All steel, smooth surface with integral support legs.
          1. Dimensions (WxLXH): 14.6 x 14.6 x 2.76 inch (371 x 371 x 70 mm).
       2. Corner Plate (WxL): 7.8 x 7.8 inch (198 x 198 mm).
          1. Reinforced: Four posts added to each plate.

Posts (Dia x L): 0.625 x 2.76 inch (1.6 x 70 mm). 2011-T3 Aluminum.

* + - * 1. Channel Plate (WxL): 11.7 x 5 inch (297 x 127 mm).
        2. Reinforced: Four posts added to each plate.

Posts (Dia x L): 0.625 x 2.76 inch (1.6 x 70 mm). 2011-T3 Aluminum.

* + - * 1. Under Sheet: Polyethylene Foam. Substitutions are not permitted without prior written approval from Manufacturer.
      1. Border Components:
         1. Half Unit (WxLxH): 7.3 x 14.6 x 2.75 inches (185 x 370 x 70 mm).
         2. Quarter Unit (WxLxH): 7.3 x 7.3 x 2.75 inches (185 x 185 x 70 mm).
         3. Half Channel (WxL): 5.9 x 5 inches (149 x 127 mm).
         4. L-Type Border (WxLxH): 20 x 4.5 x 2.75 inch (500 x 115 x 70 mm).
         5. End Cover (WxLxH): 20 x 4.5 x 2.75 inch (500 x 115 x 70 mm).
         6. Reinforcing Band (WxLxH): 1.1 x 14.6 x 2.68 inch (28 x 370 x 68 mm).
         7. Trapezoid Plate (WxL): 1.4 x 8 inch (35 x 200 mm).
         8. L-Type Trapezoid Plate (WxL): 8 x 8 inch (200 x 200 mm).
      2. Optional Components:
      3. Slope 1:12 (WxLxH): 16 x 33 x 2.75 inch (406 x 840 x 70 mm).
         1. Slope 1:20 (WxLxH): 16 x 55 x 2.75 inch (406 x 1397 x 70 mm).
         2. Internal 33 inch (WxLxH): 33 x 33 x 2.75 inch (840 x 840 x 70 mm).
         3. Internal 55 inch (WxLxH): 55 x 55 x 2.75 inch (1397 x 1397 x 70 mm).
         4. External 33 inch (WxLxH): 33 x 33 x 2.75 inch (840 x 840 x 70 mm).
         5. External 55 inch. (WxLxH): 55 x 55 x 2.75 inch (1397 x 1397 x 70 mm).

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly constructed and prepared.
         1. Examine with Installer and manufacturer's representative.
            1. Substrates: Clean, dry, and free of conditions interfering with installation.
            2. Verify tolerances, clearances, and comply with requirements specified.

Minimum Subfloor Flatness (FF): 25.

Minimum Subfloor Levelness (FL): 20.

* + - * 1. Electrical Boxes and Openings: Must be installed in accordance with Drawings, and approved Shop Drawings.
    1. Proceed with installation only after unsatisfactory conditions have been corrected.
    2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
  1. PREPARATION
     1. Complete subfloor preparation. Dust, dirt, and construction debris must be cleared before beginning installation.
     2. INSTALLATION
     3. Undersheet: Place on substrate receiving the access floor system. Sheets must be contiguous, wrinkles free, and butted edges.
     4. Adaptive Cabling Distribution Access Flooring and Accessories: install per approved Shop Drawings.
        1. Manufacturer's Authorized Representative: Must supervise installation ensuring installation complies with performance requirements and is free of instability, rocking, rattles, and squeaks.
     5. Flooring and Ramps: Secure and seat in place. Do not force placement.
        1. Anchor to Concrete: Through predrilled holes. Tapcon screw anchors or comparable product.
     6. Border Components: To have a close fit with adjoining construction.
        1. Voids: up to 1/2 and 3/4 inch (13 and 19 mm) where panels abut vertical surfaces.
     7. FIELD QUALITY CONTROL
     8. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.
        1. Factory-Authorized Service Representative: Test and inspect components, assemblies, and equipment installations, including connections.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
  1. CLEANING AND PROTECTION
     1. Clean products in accordance with the manufacturers recommendations.
        1. Keep access flooring broom clean finish substrates are applied.
     2. Protect flooring system until date of Substantial Completion.
        1. Be sure load capacity is not exceeded.
     3. Touch-up, repair or replace damaged products before Substantial Completion.
  2. DEMONSTRATION AND TRAINING
     1. Factory-Authorized Manufacturer Representative: Train Owner's maintenance personnel to adjust, and maintain access flooring.
        1. Best Practices Training: Schedule within three months after Substantial Completion.
           1. Attendees: Owner, Architect, Contractor, and planning, technical, and management staff from Owner's facilities, IT, and electrical groups.

END OF SECTION