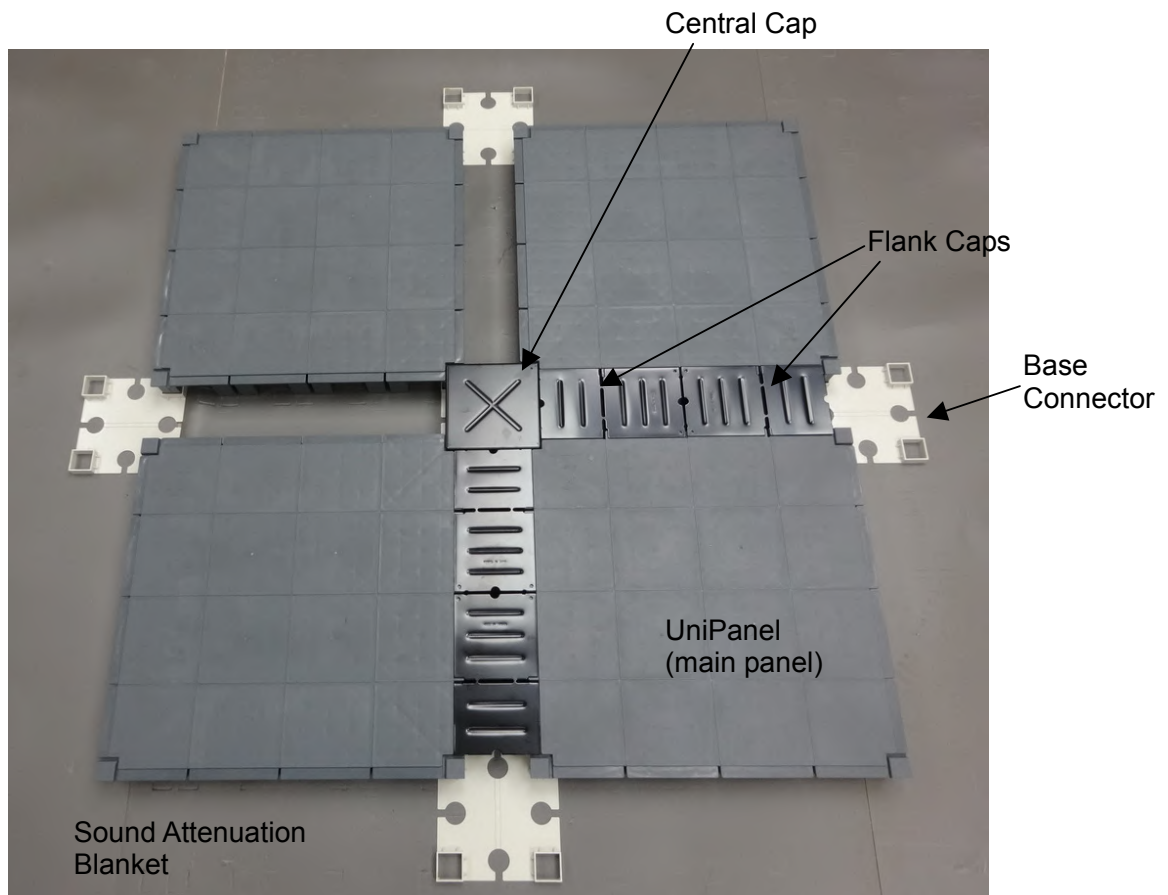




Installation Manual

ECO series cable management access floor systems



Netfloor® Cable Management Systems

Installation Guide

ECO series CA600R / CA500R / CA400R

General Information

ECO series CA-600R, CA500R and CA-400R (the Systems) feature the most unique cost effectiveness in both system design and installation performance. No special tools are required. Special trained traditional raised floor installers are not necessarily required too. Professional quality installation can be achieved by flooring installers such as those of carpet tiles and PVC tiles; or carpenters, handymen, and even amateurs, not mention access floors.

Installation Time

The following estimates do not include material preparation and handling time.

For open space:

Trained installer: 70 ~ 80 sq. meters (750 SF ~ 860 SF) per man- day.

Newly-trained or amateur: 45 ~ 60 sq. meter (500 SF ~ 650 SF) per man-day.

Small rooms and irregular floor plans: may call for 20 to 30 percent more installation time.

Good preparation and job site planning are very influential to installation costs.

Recommended Tools

electric Drill & Driver

laser alignment

chalk line

pencils

cutting Knife

carpenter cutting saw

steel cutting saw

tape measures

long-hand paint roller

Application

perimeter & wall installation

setting starting row, straight line alignment

cut UniPanel into Sub-Panels

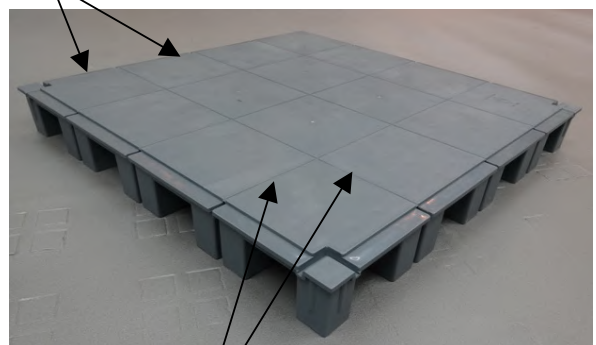
cut UniPanel at perimeter

cut steel components

apply adhesives for carpet tiles installation on the Systems

UniPanel (main panel): The unique UniPanel are structurally composed of 16 independent Sub-Panels. Each SubPanel is standing on four integral pedestals. The SubPanels are connected by a 2mm uniform joints on all sides to form the united UniPanels. This feature obviously provides maximum built-in flexibility for the panels to easily accommodate small variance there might be in sub-floor elevation--as the joints are not fully rigid. When encountering other architectural elements such as walls and doorways, the UniPanels can be easily cut off from joints into SubPanels, or sawed to size to fill the wall gaps.

composed of 16 Sub-Panels



2 mm thick joints Sub-Panels

Part I - Main Components and System Composition

			
<p>1. UniPanel (main panel) CA-611R: 60 mm high CA-511R: 50 mm high CA-411R: 40 mm high Size: 510 mm X 510 mm</p>	<p>2. Central Cap CA414R Thickness: 2.3 mm Size: 148 X 148 mm</p>	<p>3. Base Connector CA-415 Size: 169 mm X 169 mm</p>	<p>4. Flank Cap AD613R Thickness: 2.3 mm Size: 223 mm X 125 mm</p>

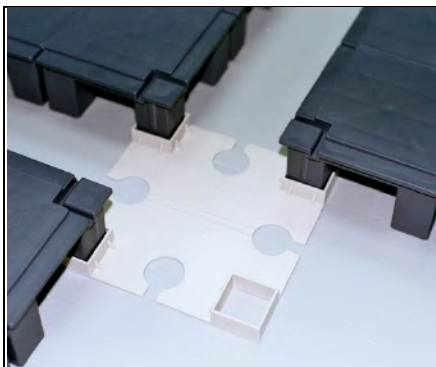
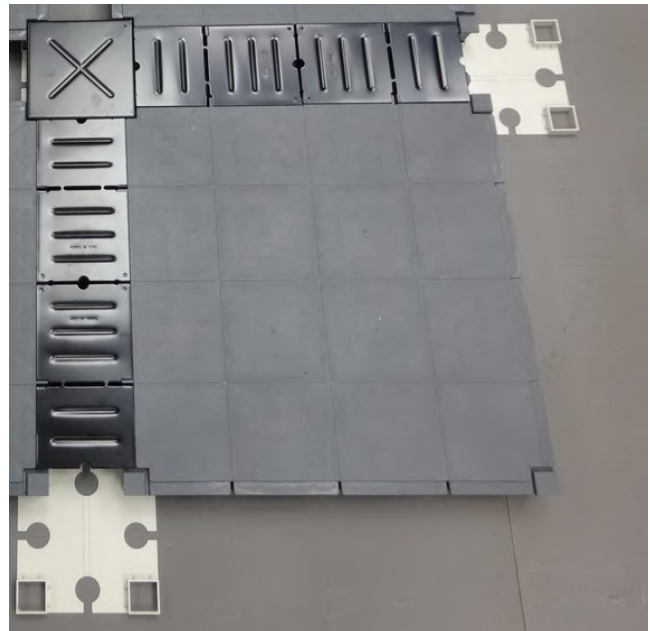
I-1 Composition of Main Components

module set:

1 UniPanel + 1 Base Connector + 1 Central Cap
+ 4 Flank Caps

size of 1 module set: 600 mm X 600 mm
(23.62" X 23.62")

Cable Trenches: Base Connector to connect corner feet of UniPanels to form standard 90 mm width, grid-pattern Cable Trenches automatically



4-way Base Connector to connect corner pedestals of UniPanels, grid-pattern Cable Trenches formed automatically



Central Cap and Flank Cap are fully accessible, inter-changeable. Users can lift the caps easily without using special tools



Continuous interlocking process to lay UniPanels on the floor. It follows the floor contour with no leveling needed.

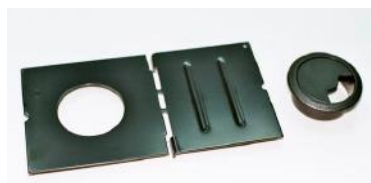
5. Sound Attenuation Blanket AD-331

2 mm thick PU foam, 1 meter width



6. Exit-Cap & Grommet AD613D6 & AD-518

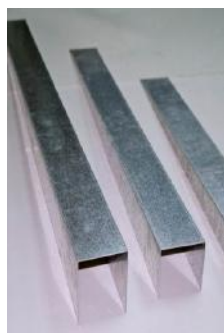
Exit-cap is same size as Flank Cap, with 60 mm opening to fix with grommet.



when cable access is required, replace the Flank Cap with Exit Cap.

Part II - Accessories

Steel Ramp, aluminum Ramp Rail, aluminum Free Standing, and steel Edge Rail



7. Ramp

AD625: 60 mm high
AD525: 50 mm high
CA425: 40 mm high



8. Free Standing

AD621: 60 mm high
AD521: 50 mm high
CA421: 40 mm high



9. Ramp Rail

AD326



10. UniPanel Supporter

AD627 (for CA600R)
AD527 (for CA500R)
AD427 (for CA400R)

11. Starting Cap



Starting Cap

CA428 install to cover gaps at the starting row Cable Trenches

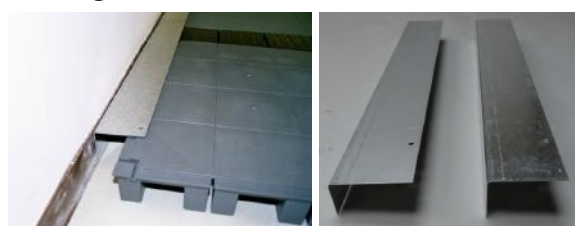


12. Edge Trimming CA442R

Similar application as Starting Caps, to seal onto recess edges at first-row UniPanels



13. Edge Rail



Edge Rail for perimeter installation at gap residual less than 130 mm, without cutting panels

AD623: 60 mm high
AD523: 50 mm high / CA423: 40 mm high

Part III - Before installation

The following Instructions should be read before installation:

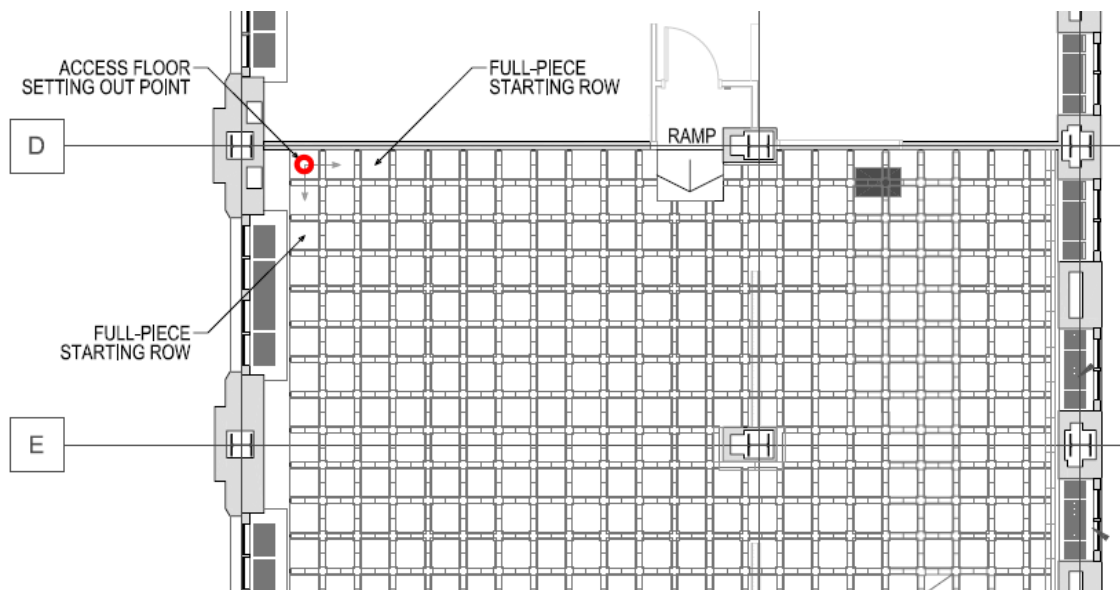
- a. Netfloor systems are for **in-door use** only.
- b. Netfloor **isn't suitable for using as surface floor covering**. On top of the systems, modular carpets, or commercial grade PVC tiles (more than 5 mm thick) are standard finish flooring.
- c. **Condition:** UniPanel (main panels) and adhesives should be conditioned at room temperature, not lower than 5 degree C (40 F).
- d. **Floor Preparation:** Sub-Floor must be free of grease, oil, wax, and moisture or any other material. All holes, cracks, and low places must be filled with floor patching compound.
- e. Sub-floor of the job site should be generally **level**. Elevation variation shall be no more than 10 mm (3/8") within 1 meter (3.3 feet).
- f. **The following situation to be installed without using Sound Attenuation Blanket—**
(1) Old sub-floors installed with loop-pile carpet which are rigidly flat (2) pvc tiles or sheet vinyl without thick soft foam-back. ECO series can be installed directly on these type of sub-floors without removing, blanket's costs to be omitted.

Part IV - Starting row/rows setting

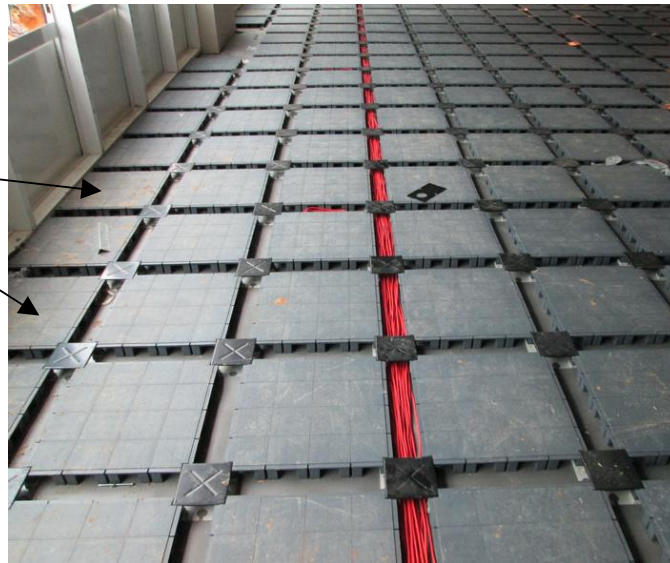
Since the systems are not be used as surface flooring, it is not necessary, as you would for aesthetic reason, to install from the intersection of central lines of the room. To maximize usage of full panels at the borders, it is recommended that you select the longest walls or the entrance wall as starting row or rows.

Note: Correct selecting the starting line is important, it will save materials and labor costs significantly. Below are guidelines for deciding starting piece and row of UniPanels.

- a. **Setting starting piece/rows along the 2 longest walls --**
a-1: **Starting row/rows by full-piece UniPanel**

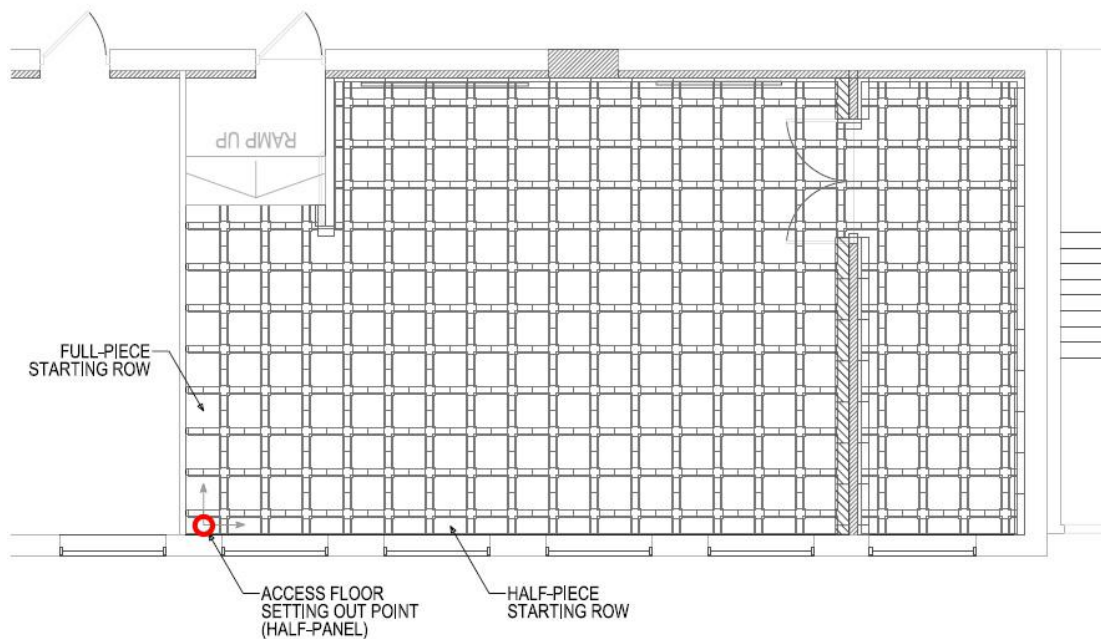


Full-size UniPanels
along the longest
wall or walls



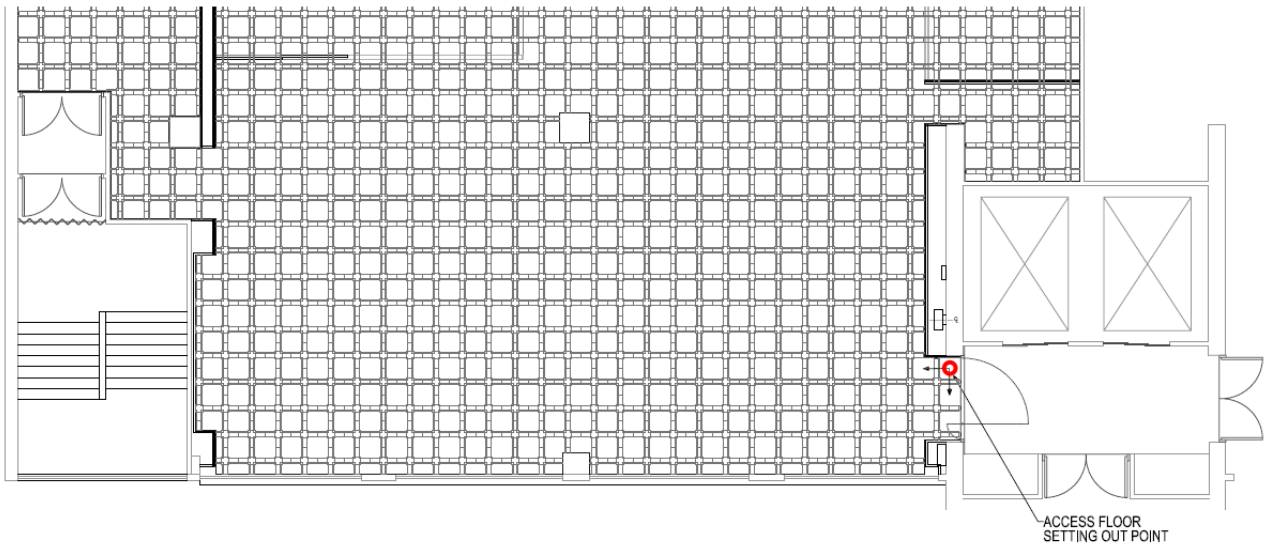
a-2: setting starting row/rows by half-piece UniPanel

Above (a-1) starting row/rows by full-piece UniPanels along the longest wall is using in most cases. In a few occasion, strategically using of half-piece UniPanel as starting row. When the distance between the 2 walls (the other wall against the starting wall) are exact multiple to 600 mm (i.e. ECO system's module size), or within 100 mm shorter than multiples of 600 mm, use of half-UniPanels as starting row is an option. For example, the distance is 5.4 meters (9 times of 600 mm) or 5.3 meters (8 times + 500 mm), use half-UniPanels as starting row, then after connecting to the other side, will be another half-UniPanels, or by just cutting the half-UniPanel 100 mm off, to fit the other side wall. By this, will avoid using of Edge Rails and Starting Caps.



b. Setting starting row from the main entrance --

For new interiors, CA600 (FFH 60 mm) may connect to the stoneware floor tiles from the lobby at the entrance at same FFH. And starting UniPanels from the entrance is a popular option too.



c. Other way of setting out point as per your plan according to the job site special situation --

Above a. and b. are basic guidelines for your plan. You may find better option to decide the setting start point for you installation plan.

UniPanels starting from ramps
(example of a chain store showroom)

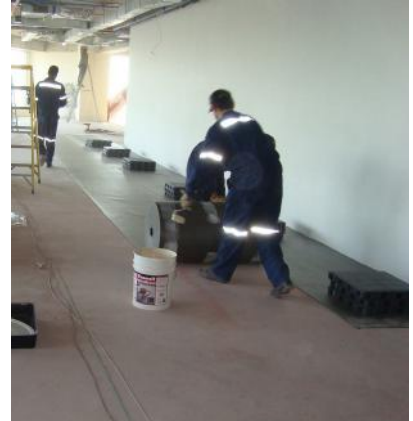


UniPanels starting from ramps

Part V - Installation

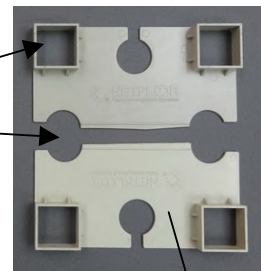
a. Apply **Sound Attenuation Blanket**.

The blanket is in roll type, 1 meter (3.28 feet) width, and 100 meters (328 feet) long, which can be easily rolling by one person. Adhesives are not required. Just run the roll on the sub-floor with one end (may be pressed by a pack or UniPanel), few packs may be in middle of long site. Sides of a roll shall not be overlapped with other roll, and may be gapping from 1 mm to 5 mm from another roll. (picture at right)



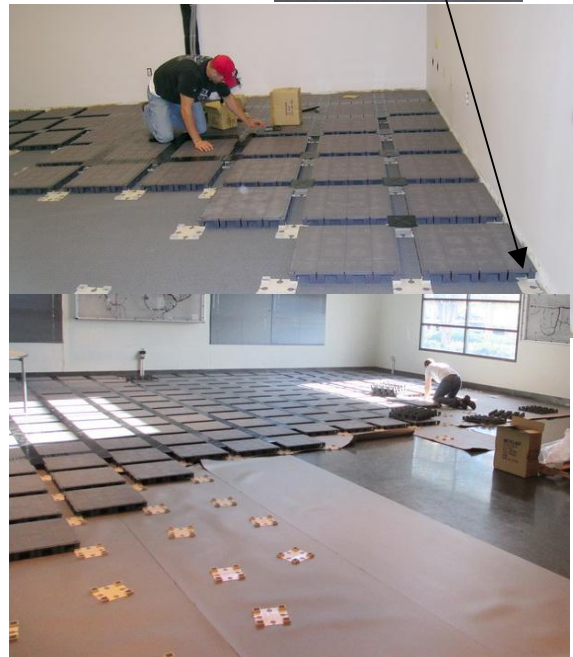
- ### b. **Old carpet or resilient floor** to substitute Sound Attenuation Blanket: For retrofit installation over existing commercial rated low-pile carpet, carpet tile, PVC tile and sheet vinyl, step a (blanket) may be omitted. However, application over thick foam-backed or cut pile carpet is not recommended. (refer to Part III – f). The old carpets shall be vacuum cleaned before install panels.

- ### c. **Half-size Base Connectors to connect the first starting row/rows UniPanels:** Use knife to cut **Base Connector** into halves. Apply **half-size Connectors** to connect UniPanels from the first piece, to repeat connecting and extending the starting row/rows.



- ### e. **Repeat installation with full-size Base Connectors:** Starting from the second row, use Base Connectors to connect UniPanels consecutively. No tool is needed. **Extension of the Connectors and UniPanels is simple and straightforward.**

- ### f. **Install Central Caps and Flank Caps onto Cable Trenches:** Base Connectors connect UniPanels at their corner feet, setting the panels apart by a standard 90 mm (3.54”) distance, and form Cable Trenches automatically. After completing 3 to 4 rows of UniPanels, Install Central Caps and Flank Caps until reaching the opposite walls at less than 600 mm distance (a module size distance). Complete connecting whole room before capping is not suggested because you might squeeze the panels too tight during connecting, which might jeopardize the capping later on. Straight line alignment every 4 or 5 rows is also recommended during connecting panels.

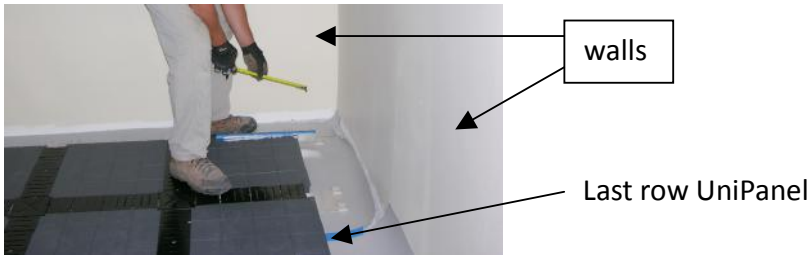


g. **Finish Wall / Perimeter:**

Below are 2 methods to finish the residual along the walls:

(1) Distance greater than 130 mm, less than 599 mm: cut UniPanel at required size:

a: measure the distance from UniPanel to wall



b: cut UniPanel (allow 90 mm cable trench width, plus 1 mm allowance to meet the wall)

For example, in case distance is 245 mm, cut a 154 mm distance for using (=245mm-91mm).



c: Connect the cut-panel at the last row Base Connector.

Then, install Central Caps and Flank Caps on the last row Cable Trench.

Note: if a lot of pedestals are cutting off from panel, and appear not well supportable, cut pieces of **UniPanel Supporters** to support under the panels' cut-side along the walls.



(2) Edge Rail (150/100 mm wide, 600 mm long): When the last-row UniPanels or Sub-Panels against the wall having residual space is less than 130 mm (5.12") in width:

Use Edge Rail to cover the residual space. Use wafer head self-tapping screws to fasten the rail at 2 ends onto the panels.



1. Edge Rail to fill the gap at walls of less than 130 mm by full UniPanels or sub-panels

2. Edge Rails to fill / strengthen the gap at entrance, or as protection at beginning of the access floor

