

Installation and Commissioning Guide

Weave Radiant Textile Panels

The information contained herein is applicable to Weave Radiant Textile Panels and is provided for reference only. Installation and commissioning of radiant panels and their associated mounting structure should be carried out only by a qualified professional.

INSTALLATION

Weave panels should be installed per the installation manual Weave Installation Guide or other project-specific installation manual provided by PARC. Further information is available regarding panel removal, panel hinging, and flex hose connection and removal. Water distribution systems (headers, mains, risers, valves, etc.) should be installed per the project requirements.

COMMISSIONING

- Water distribution systems (headers, mains, risers, valves, etc.) should be commissioned in accordance with CIBSE Commissioning Code W: 2010 Water Distribution Systems.
- 2. Confirm that valve systems (control, measurement, etc.) and strainers specified by the mechanical engineer or mechanical contractor are sized correctly for the system specifications. Ensure the valve systems and strainers are in the correct places and in the correct quantities per the mechanical drawings.
- 3. Ensure provisions are in place at all specified system connection points (such as by-pass loops, fill and flush points, etc.). Ensure the presence of vents and venting schedule as required to remove air from the water distribution system.
- 4. Prior to connecting radiant panels, chemically clean and flush the copper tubes and pipes of the water

distribution systems in accordance with BSRIA BG 29/2020 Pre-commission Cleaning of Pipework Systems. Use side stream filtration during final system flush to eliminate small particulate from the flow, if desired.

- 5. Install flex hoses following methodology described in the Weave Installation Guide, taking care to avoid kinking the hose. Zip tie or secure hoses to structure elements when the hose is longer than 1500 mm, to prevent the flow from whipping the hose around, which may potentially loosen or damage the push-on connections.
- 6. With hydronic circuits attached, flush the system a second time. Dry pressure test circuits to isolate leaks.
- 7. Perform final commissioning per CIBSE Commissioning Code W: 2010 Water Distribution Systems. Balance flow rates and check inlet and outlet temperatures meet the specified mechanical requirements.
- 8. Performance verification of the radiant ceiling can be determined using thermal imaging techniques. Hot or cold spots captured by a thermal camera may indicate lack of circulation within the system. Lack of circulation may be due to kinks in flex hoses or air locks in the system.

ACCESS AND PANEL REMOVAL

When access is required to the void above the ceiling plan, hinge panels as indicated in *Weave Installation Guide* or other project-specific installation manual provided by PARC. The Weave panels and mounting system are not designed to support the weight of a person; do not attempt to climb in the void on top of the panels or mounting system. Please refer to the project O&M Manual to confirm that hinging can be undertaken without draining the panel.



When a panel must be removed from the ceiling, first drain the panel and then, to remove the panel, follow the instructions in *Weave Installation Guide* or other project-specific installation manual provided by PARC. To drain a panel, follow instructions for option A, B, or C below, with reference to Figure 1. For all options, refer to the *Weave Installation Guide* for guidance on installation and removal of flex hoses.



Figure 1: Representative Panel Circuit

Option A: No Valves on or Between Panels, Method I (Flex Hoses Remain Attached to Panels I and 3)

- I. Close shutoff valve on water supply to panel circuit at the header.
- 2. Clear water from panel circuit.
- 3. Drop panel 2 down on its access cables.
- 4. Disconnect inlet and outlet flex hoses from tube ends on panel 2. Keep the open end of the hoses facing up and dump residual water into a bucket.
- 5. Flush panel 2 of residual water.
- 6. Remove flex hoses from panel 1 outlet and panel 3 inlet, taking care to not drip water on the panels.
- 7. Cap panel I outlet and panel 3 inlet.
- 8. Remove panel 2 from ceiling.

Option A: No Valves on or Between Panels, Method 2 (Flex Hoses Removed from Ceiling with Panel 2)

- I. Close shutoff valve on water supply to panel circuit at the header.
- 2. Clear water from panel circuit.
- 3. Drop panel 2 down on its access cables.
- 4. Disconnect inlet and outlet flex hoses from tube ends on panels I and 3. Keep the open end of the hoses facing up and dump residual water into a bucket.
- 5. Flush panel 2 of residual water.
- 6. Cap panel I outlet and panel 3 inlet.
- 7. Remove panel 2 with flex hoses still attached from ceiling.

Option B: Valves on Flex Hoses

- I. Drop panel 2 down on its access cables.
- 2. Close shutoff valve on flex hose attached to panel 2 inlet.
- 3. Disconnect inlet flex hose from panel 2 at panel. Keep the open end of the hose facing up and dump residual water into a bucket.
- 4. Flush panel 2 from inlet connection.
- 5. Close shutoff valve on flex hose attached to panel 2 outlet.
- 6. Disconnect outlet flex hose from panel 2 at panel. Keep the open end of the hose facing up and dump residual water into a bucket.
- 7. Cap inlet and outlet to panel 2.
- 8. Removal panel 2 from ceiling.

Option C: Valves at Panel Inlet and Outlet

- I. Drop panel 2 down on its access cables.
- 2. Close shutoff valve at panel 3 outlet.
- 3. Close shutoff valve at panel 2 inlet.
- 4. Close shutoff valve at panel 3 outlet.
- 5. Disconnect inlet and outlet flex hoses from tube ends on panels I and 3. Keep the open end of the hoses facing up and dump residual water into a bucket.
- 6. Remove panel 2 with flex hoses still attached and inlet and outlet valves closed from ceiling.

