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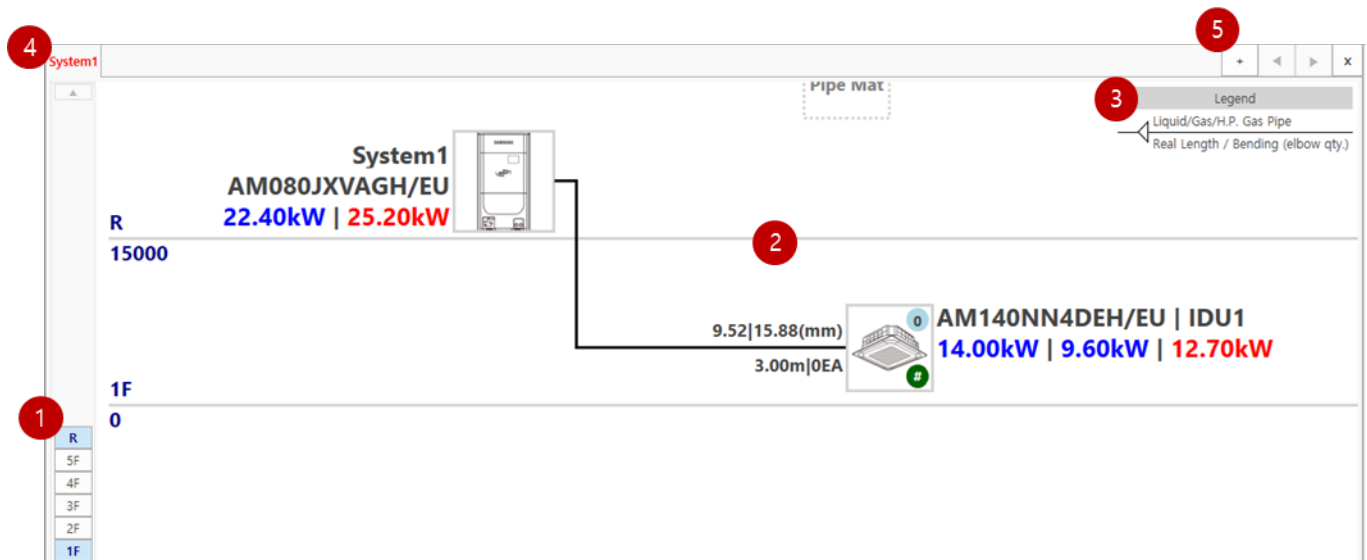
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1. Design View - Equipment/Piping View

1.1. Summary

In the Equipment/Piping view, you can create systems, place equipment and piping materials, set piping information, and more. In Building Based Design, floor bars and floor divider lines are displayed.

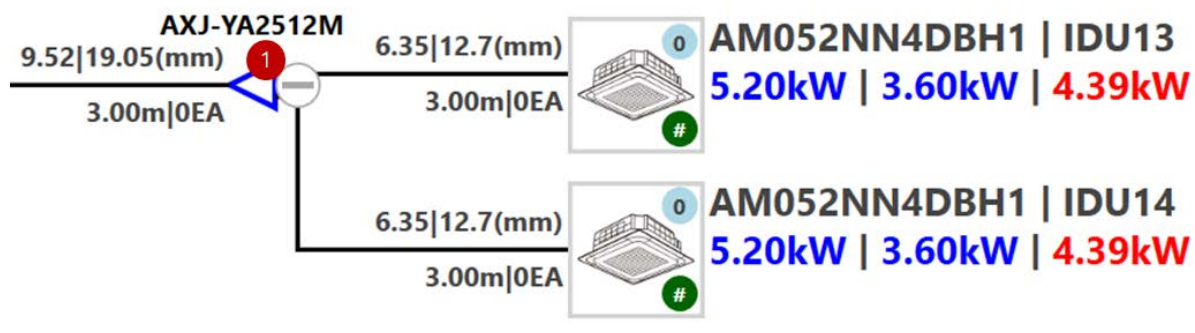


- ① Floor bar : Turns on or off the floor on which the equipment is placed in the current system. However, you cannot turn off a floor where equipment is already placed.
- ② Equipment/Piping View : Indoor/Outdoor dummy and placed equipment and pipes are displayed. You can drag and drop the appropriate equipment for each dummy, or select a dummy or pipe and click the [Add] button to place it.
- ③ Legend : A Legend of a pipe.
- ④ System Tab : The Systems in this project are displayed.
- ⑤ System Menu : Add or Delete and activate a system.

1.2. Common

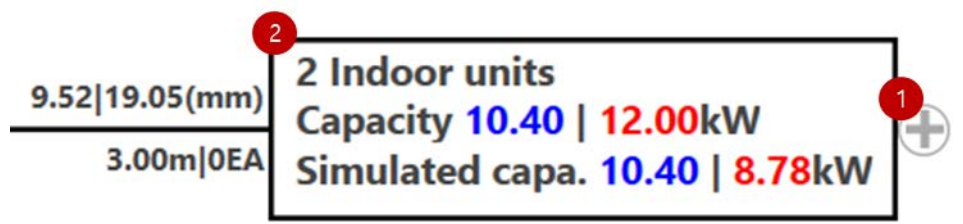
1.2.1. Folding/Open

1.2.1.1. Folding



① Folding : Connected equipment is represented in a group.

1.2.1.2. Open

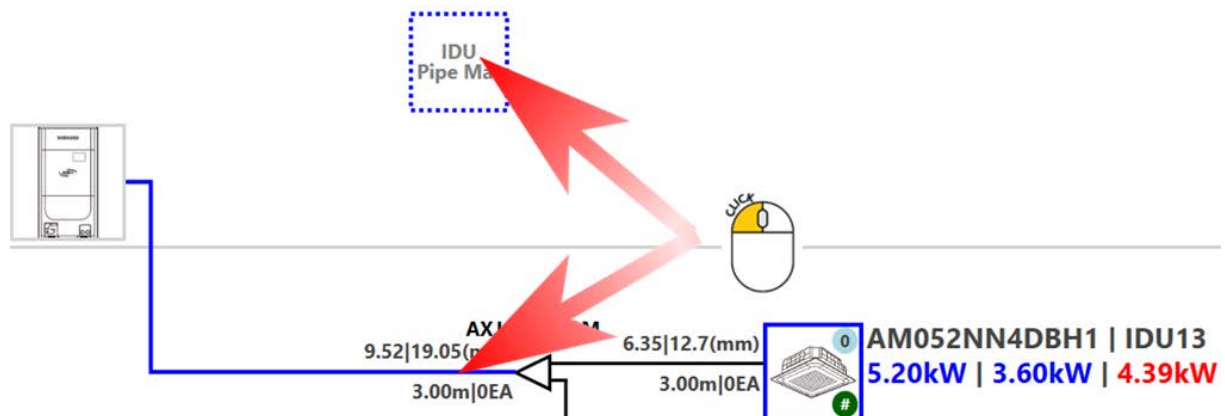


① Open : Expanding all equipment in the group.

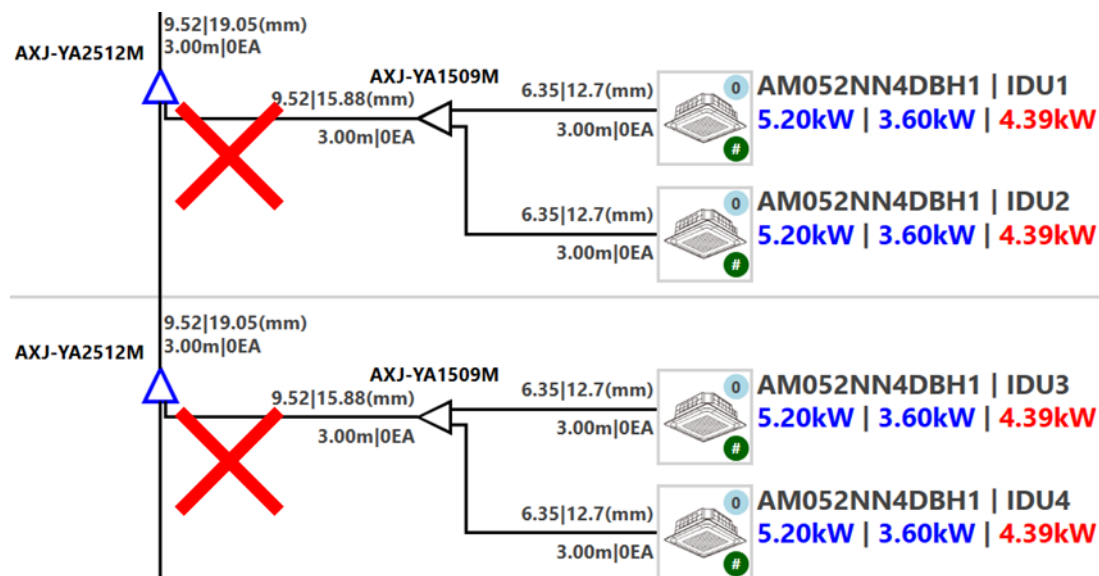
② Equipment information: Displays the number of folded equipment, corrected Cooling/Heating capacity.

1.2.2. Move Equipment

Move the selected equipment by selecting Indoor/Outdoor or Piping materials and drag & drop them onto the piping or Indoor/Outdoor dummy with the mouse. When moving Piping materials, also all the connected equipment is moved.

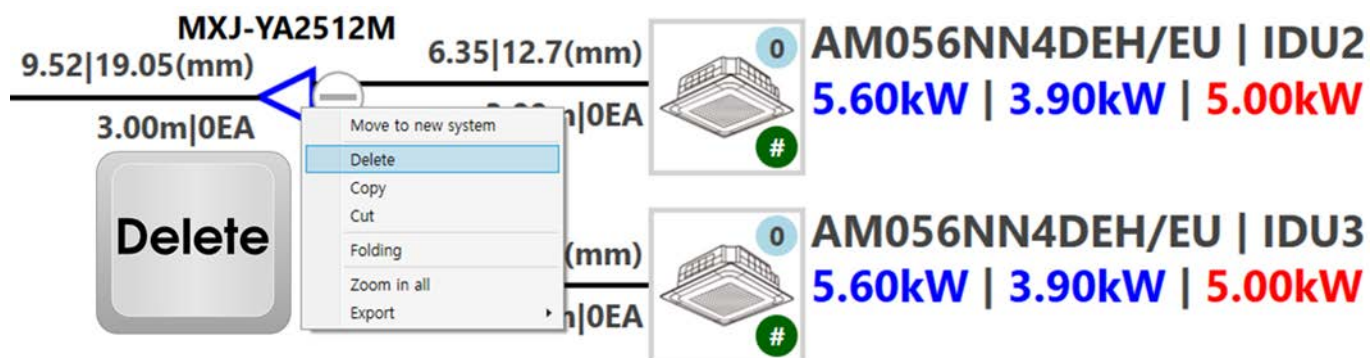


However, vertical Y-Joints placed automatically cannot be moved.



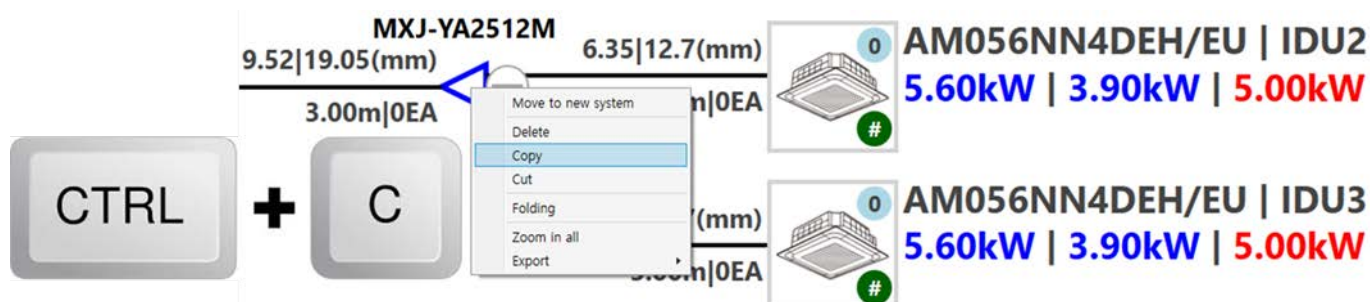
1.2.3. Remove Equipment

Select the Indoor/Outdoor unit or Piping material and click the right mouse button to execute [Delete] or pressing the Delete key. When deleting piping materials, also all the connected equipment is deleted.



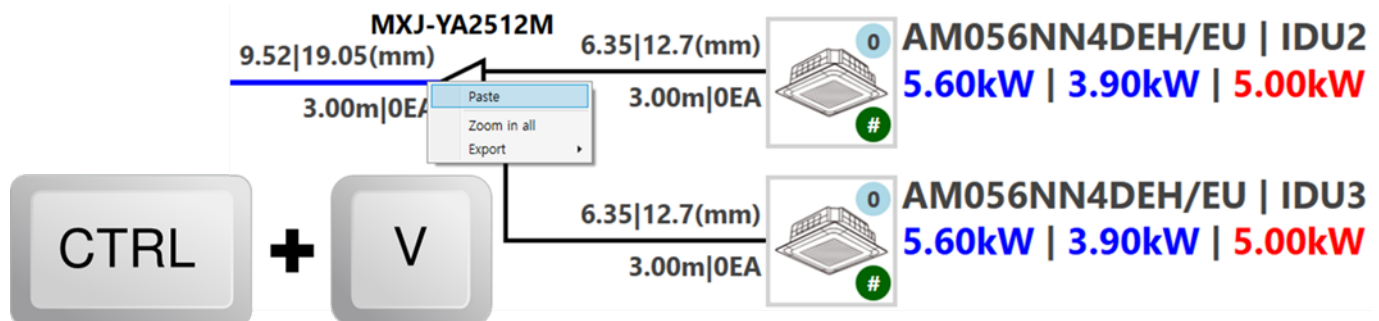
1.2.4. Copy Equipment

Select an Indoor unit or piping material and click the right mouse button to execute [Copy] or press Ctrl+C to copy. The Outdoor unit cannot be copied, and when copied piping material, all connected equipment is also copied.



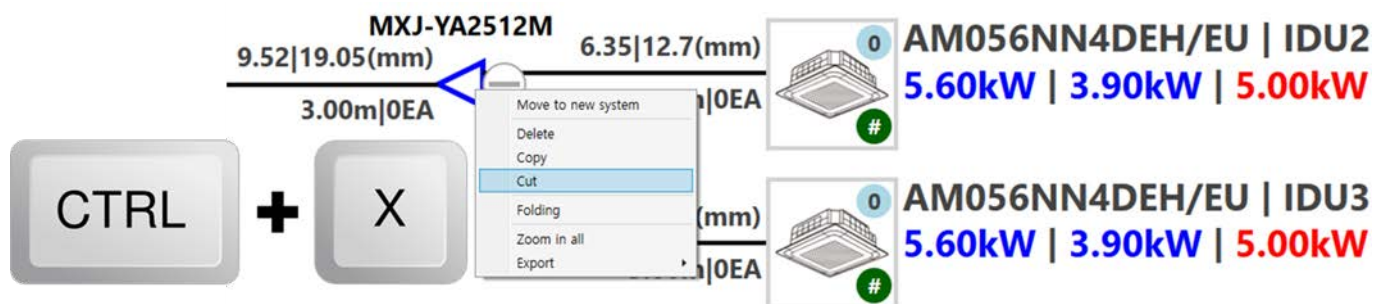
1.2.5. Paste Equipment

Select the Indoor unit/Piping material and click the right mouse button to execute the [Paste] or press Ctrl+V to paste.



1.2.6. Cut Equipment

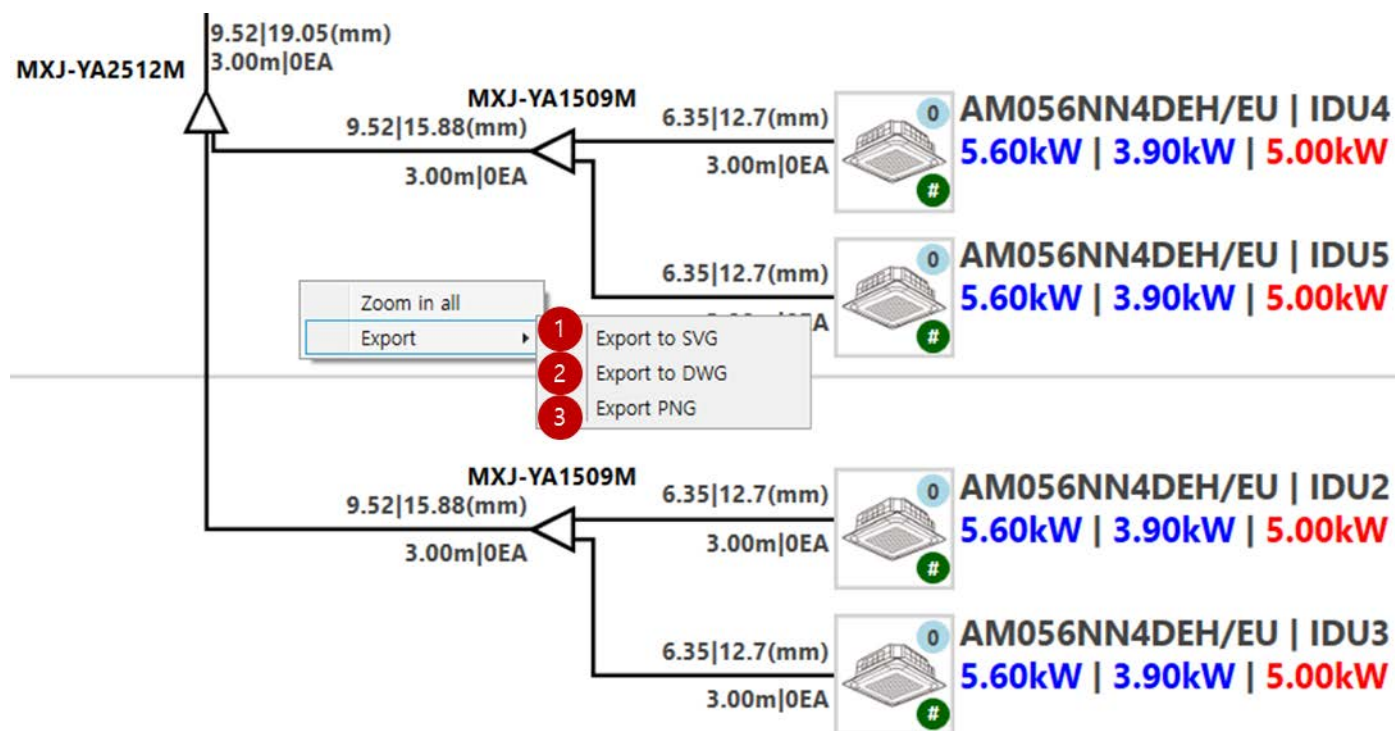
Select an Indoor unit or piping material and click the right mouse button to execute [Cut] or press Ctrl+X to cut. The Outdoor unit cannot be cut, and when copied piping material, all connected equipment is also cut.



1.2.7. Export

1.2.7.1. Equipment/Piping

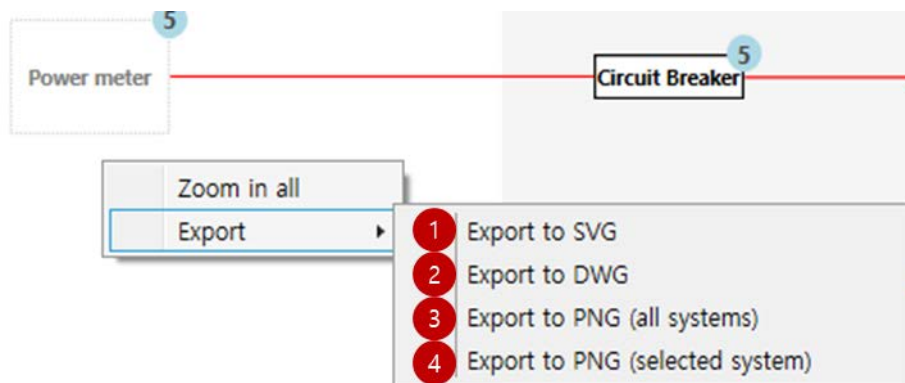
Export the designed piping diagram to a specific image file by executing the [Export] menu of the right mouse button in the Equipment/Piping view.



- ① Export to SVG: Export to an SVG vector image file.
- ② Export to DWG: Exports to a DWG drawing file.
- ③ Export to PNG: Export to a PNG image file.

1.2.7.2. Wiring/Controller

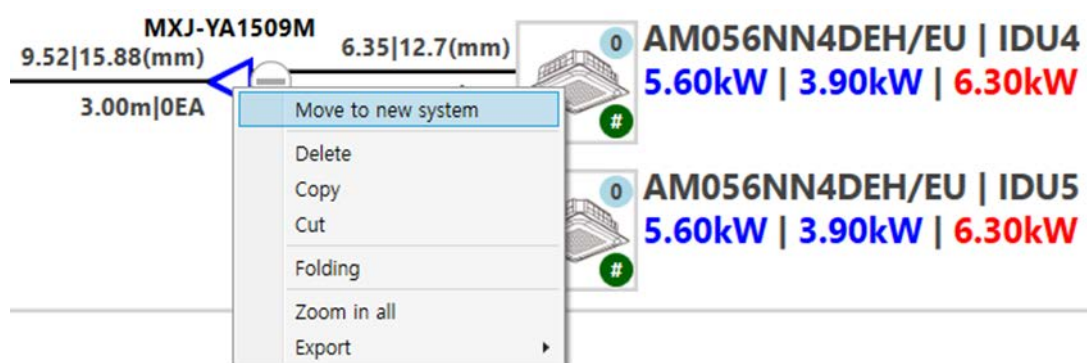
Export the designed Wiring/Control diagram to a specific image file by executing the [Export] menu of the right mouse button in the Wiring/Control view.



- ① Export to SVG: Export to the entire Wiring/Control diagram to an SVG vector image file.
- ② Export to DWG: Export to the entire Wiring/Control diagram to a DWG drawing file.
- ③ Export to PNG (all systems): Export to entire Wiring/Control diagram to a PNG image file.
- ④ Export to PNG (selected systems) : The Wiring/Control diagram of the activated system is exported to a PNG image file.

1.2.8. Move to new system

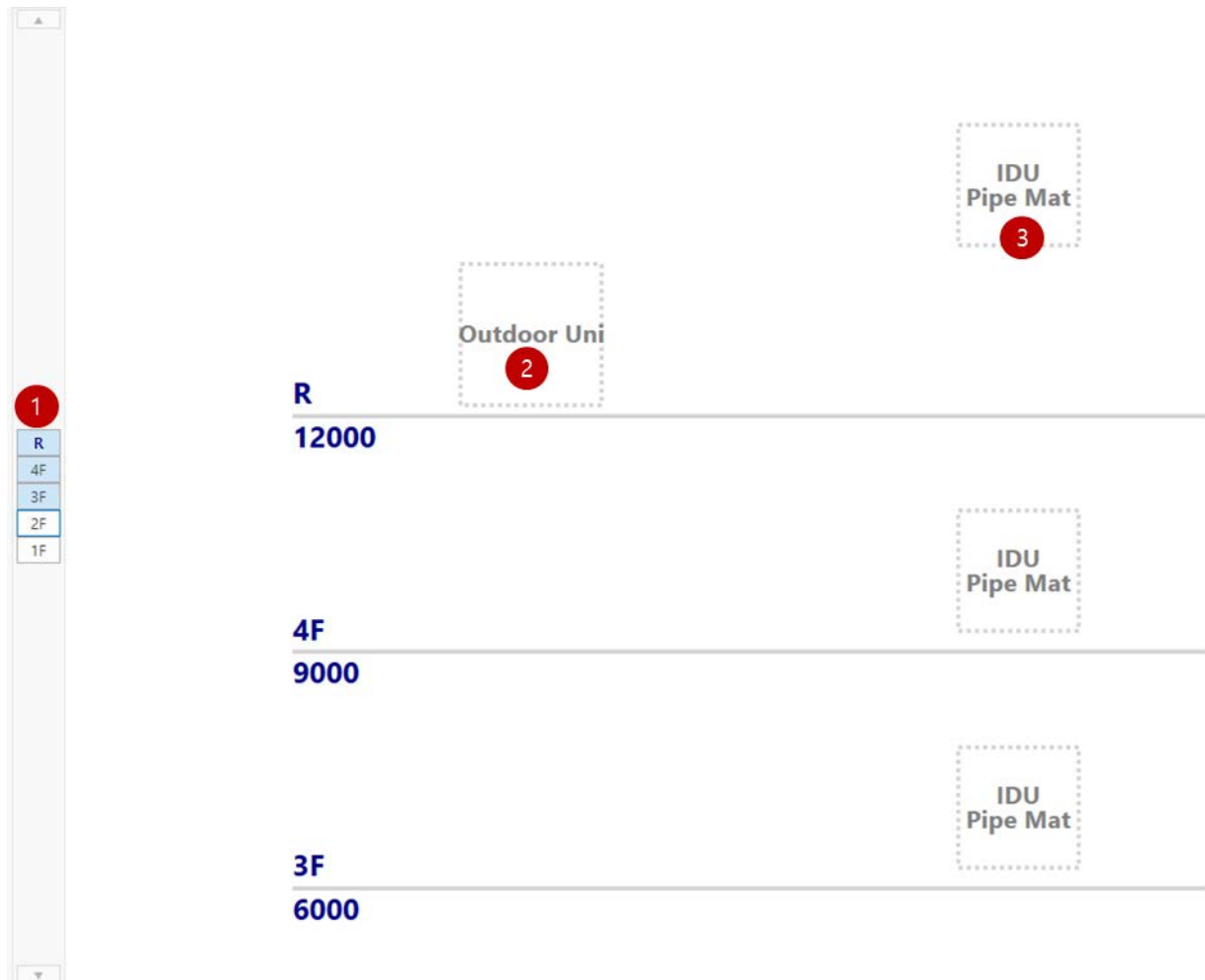
In the VRF system, select the designed piping material and click the right mouse button to executing the [Move to new system] menu to create a new system with the selected equipment and all connected equipment.



1.3. Building Based Design

In Building Based Design, you can select the design floors you want by the system and design equipment based on this. The floor name and height are displayed to the left of the floor divider line displayed in the view. When turning off to Building Based Design, all the space information is removed.

1.3.1. VRF General

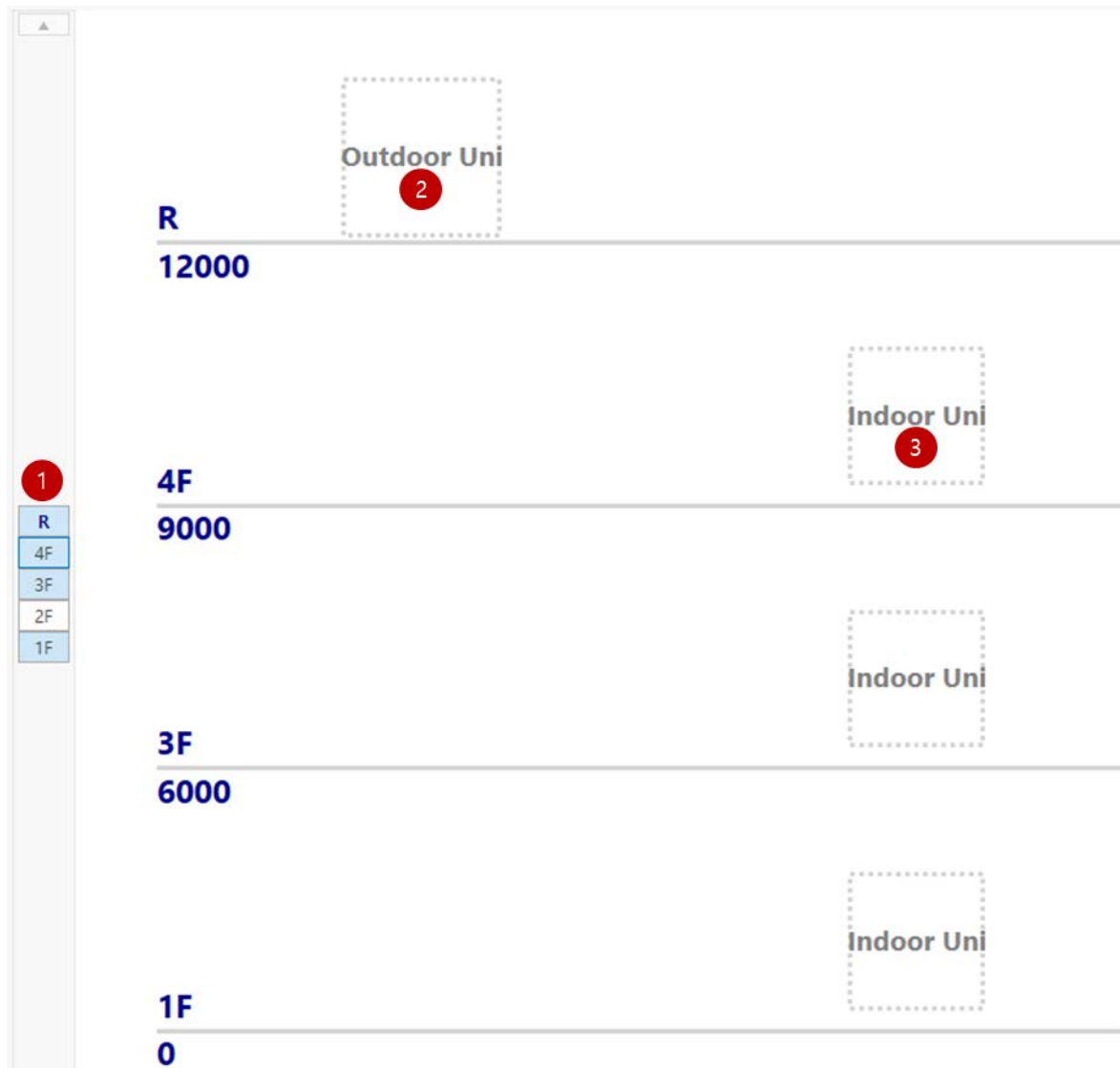


- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Indoor Unit/Piping Material Dummy : A Dummy for an Indoor unit and Piping Material. It cannot be moved.

1.3.2. DVM Home(Single Piping)

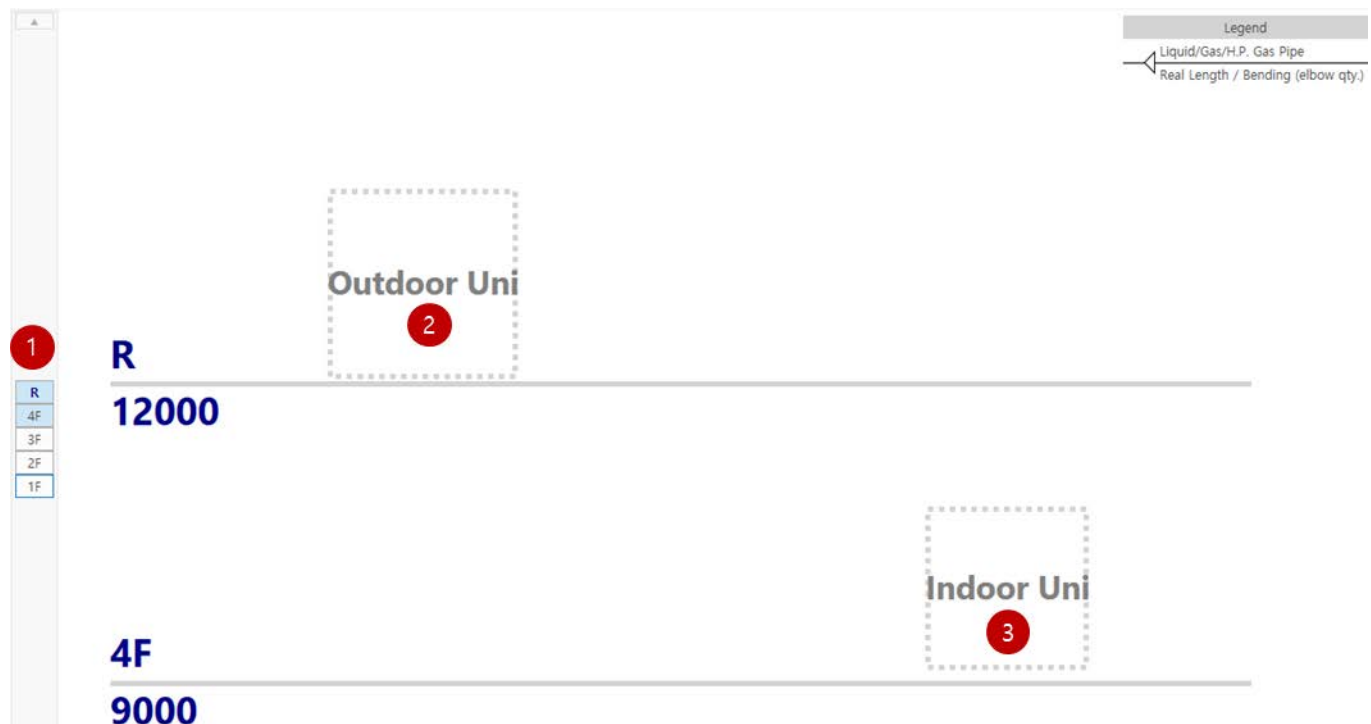
Design the same as VRF General System.

1.3.3. DVM Home(Multi Piping)



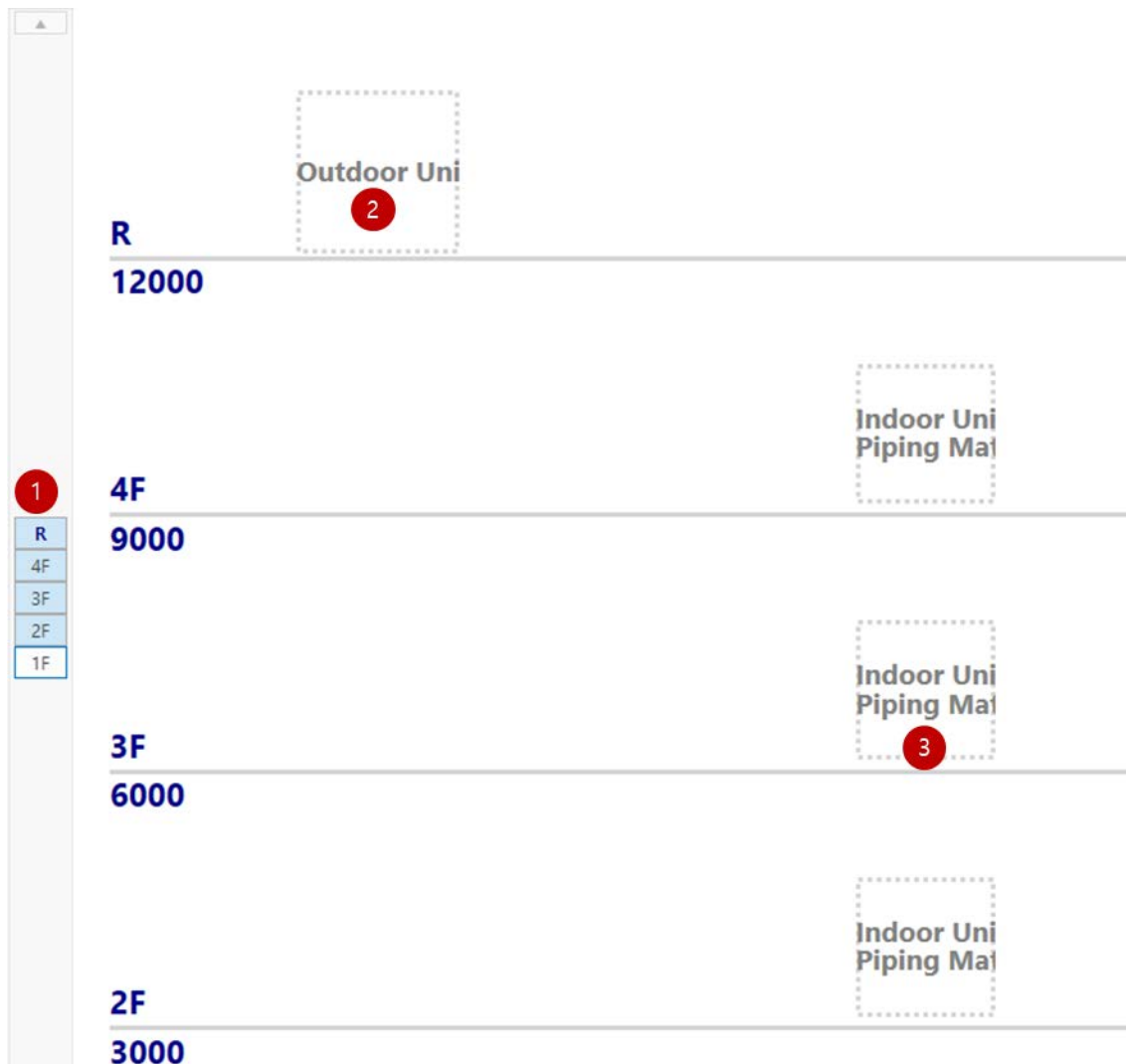
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Indoor Unit Dummy : A Dummy for an Indoor unit. It can move to another floor by drag and drop.

1.3.4. Single CAC



- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Indoor Unit Dummy : A Dummy for an Indoor unit. It can move to another floor by drag and drop.

1.3.5. Single CAC (DPM)



- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Indoor Unit Dummy : A Dummy for an Indoor unit. If the Indoor unit is placed, the same Indoor unit model is automatically placed on all dummy. The Indoor unit dummies can be moved to another floor by drag and drop.

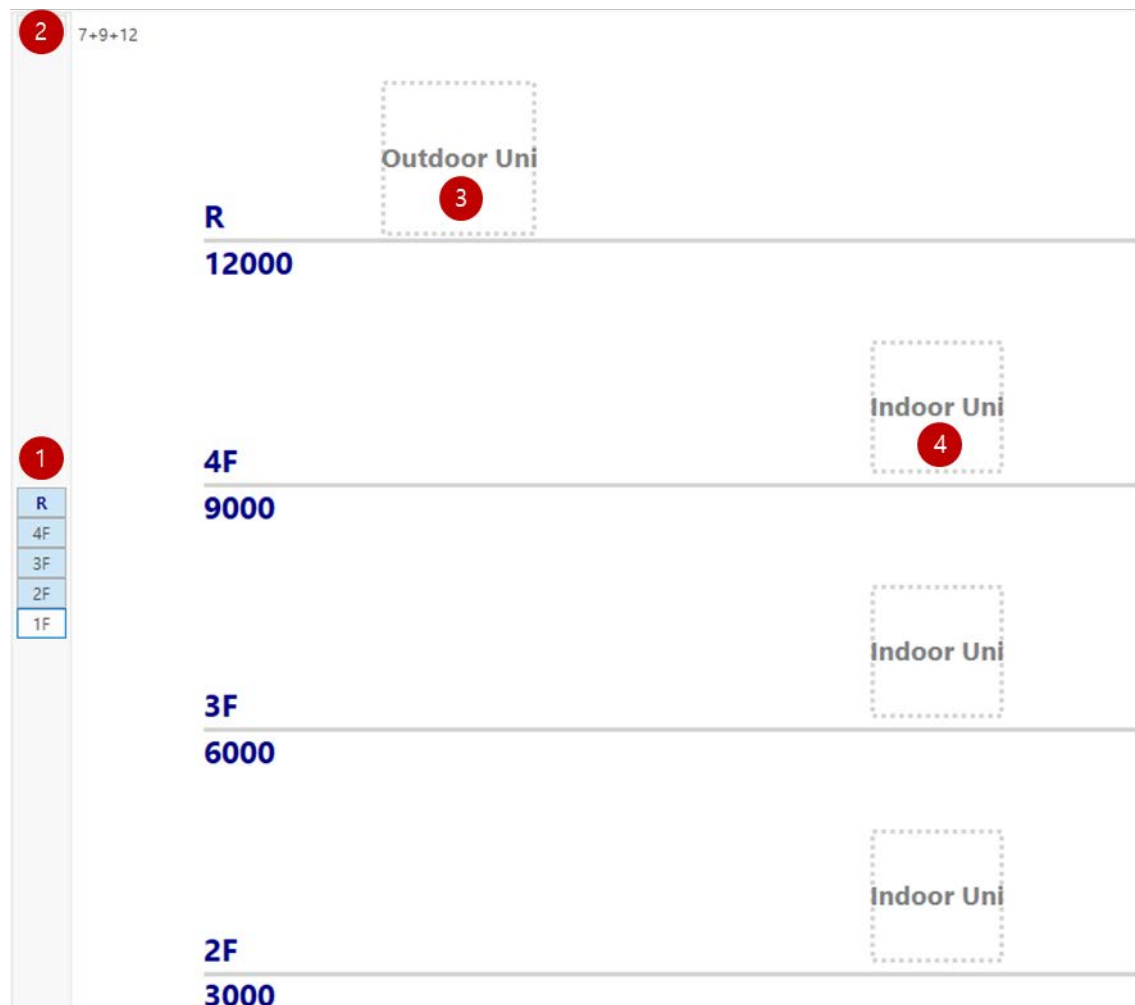
1.3.6. PAC

Design the same as Single CAC.

1.3.7. RAC

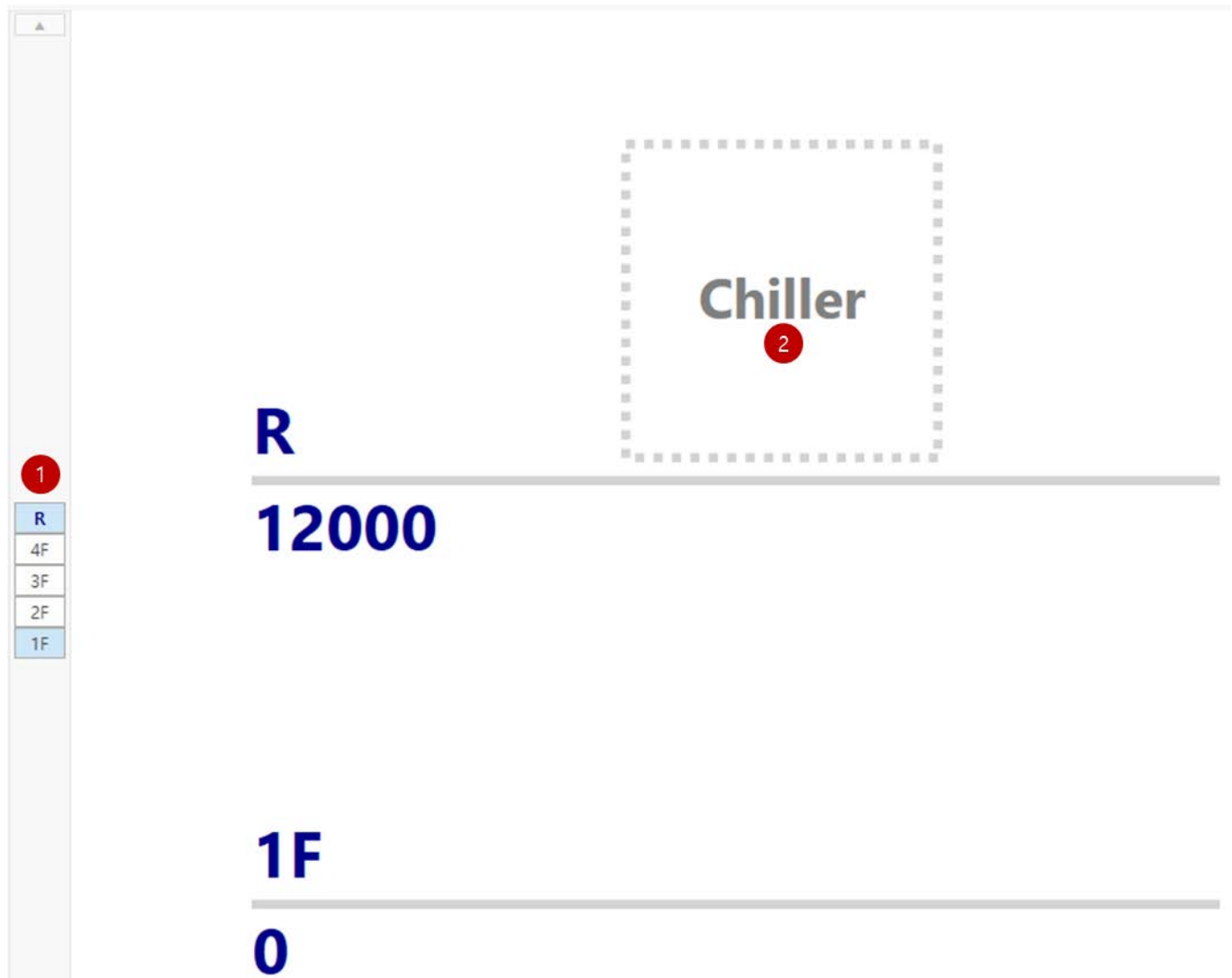
Design the same as Single CAC.

1.3.8. FJM



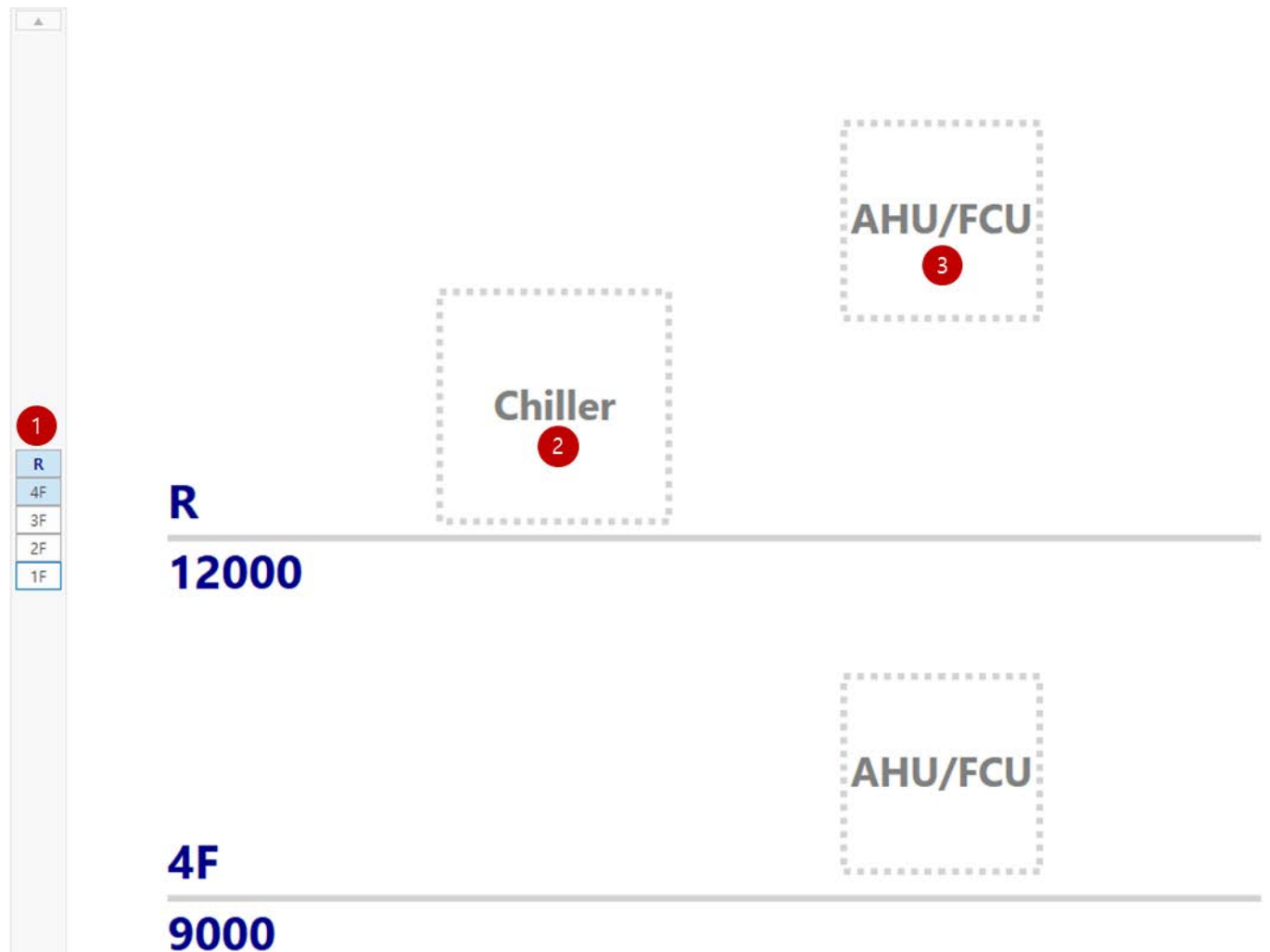
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Indoor Unit Index : The capacity index combination of Indoor units for the system.
- ③ Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ④ Indoor Unit Dummy : A Dummy for an Indoor unit. It can move to another floor by drag and drop.

1.3.9. Chiller Only



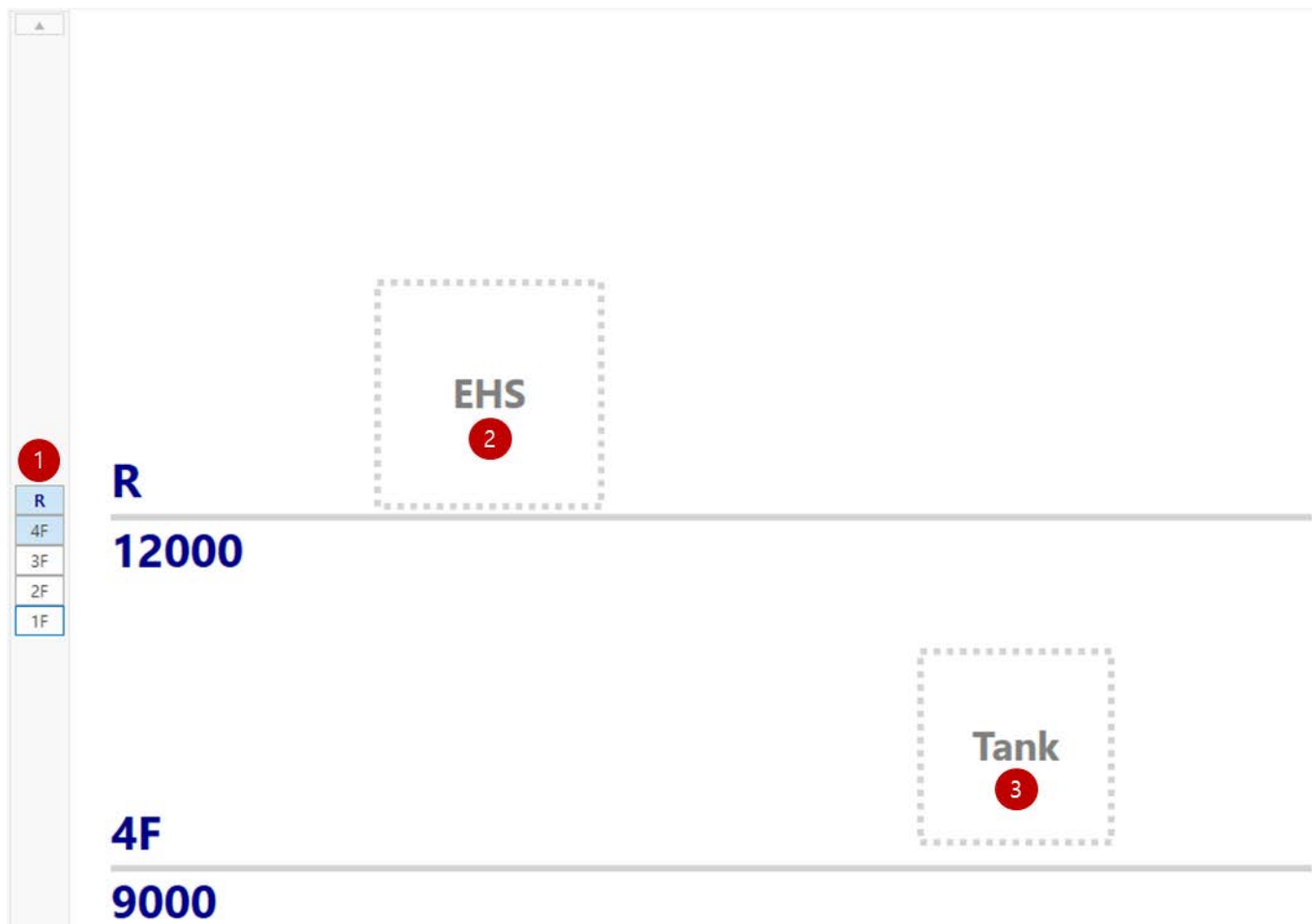
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.

1.3.10. Chiller + AHU/FCU



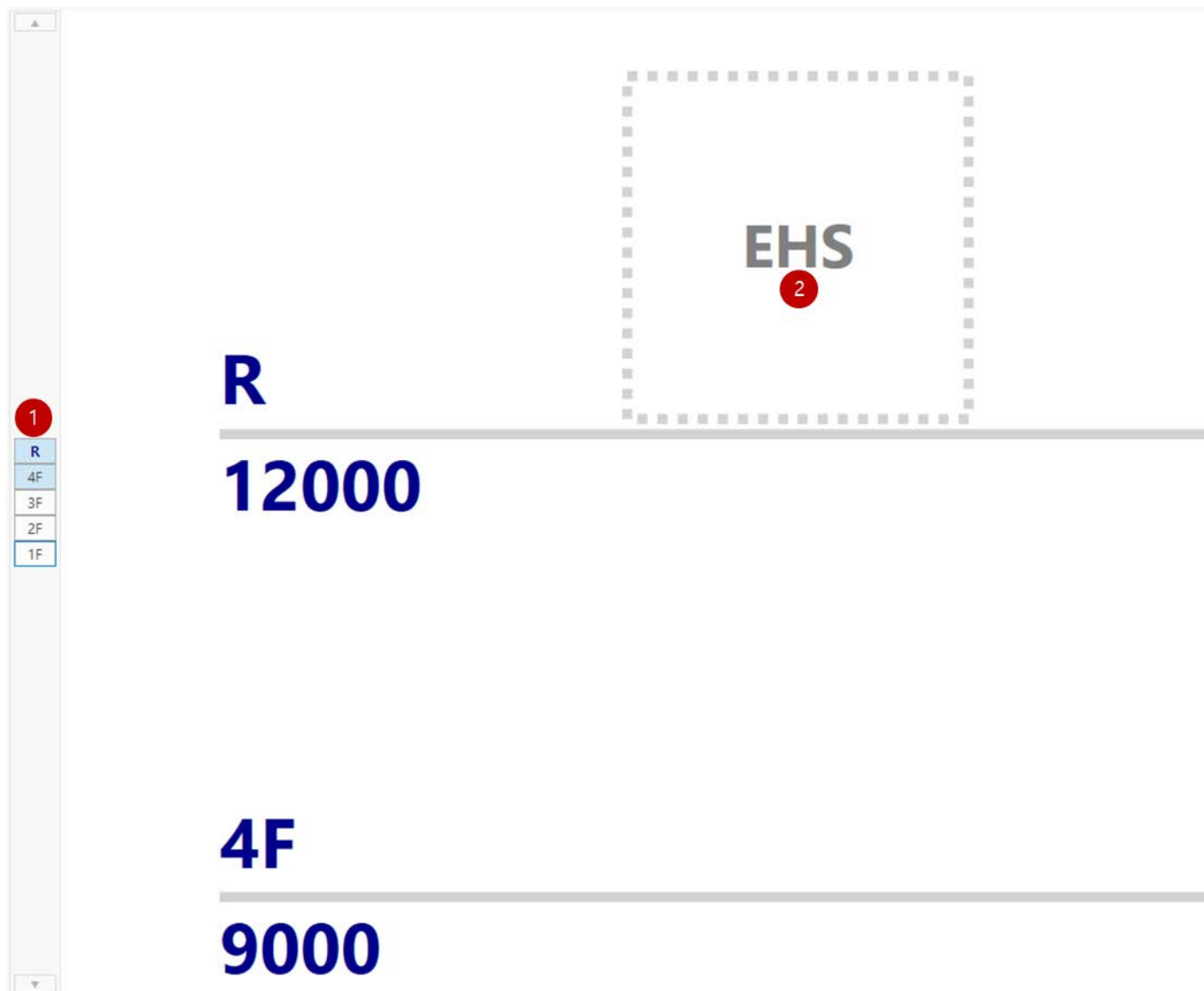
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ AHU/FCU Indoor Unit Dummy : A Dummy for an AHU and FCU Indoor unit.

1.3.11. EHS Mono Tank Included



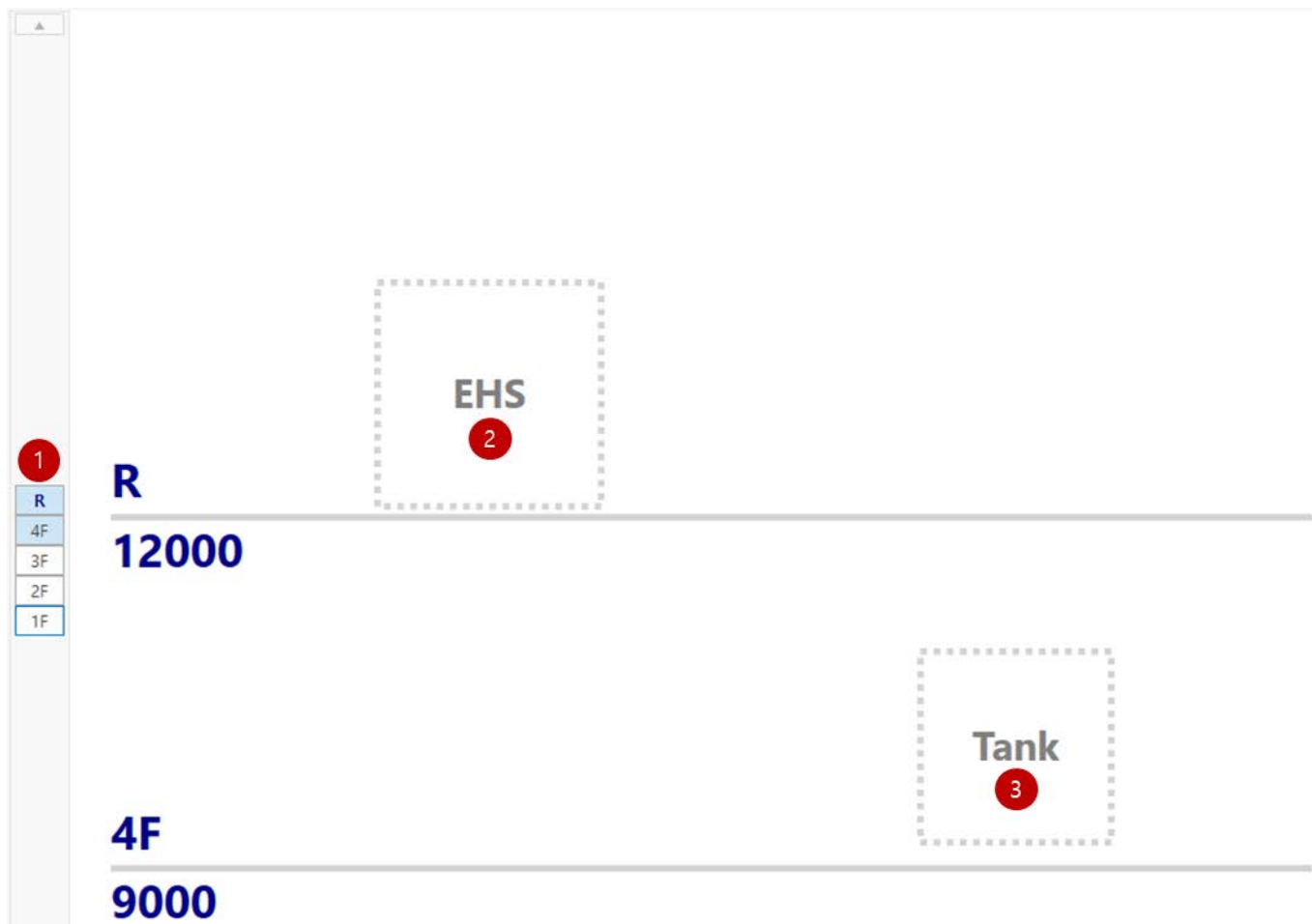
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Tank Indoor Unit Dummy : A Dummy for a Tank Indoor unit.

1.3.12. EHS Mono Tank Excluded



- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.

1.3.13. EHS Split Tank Included



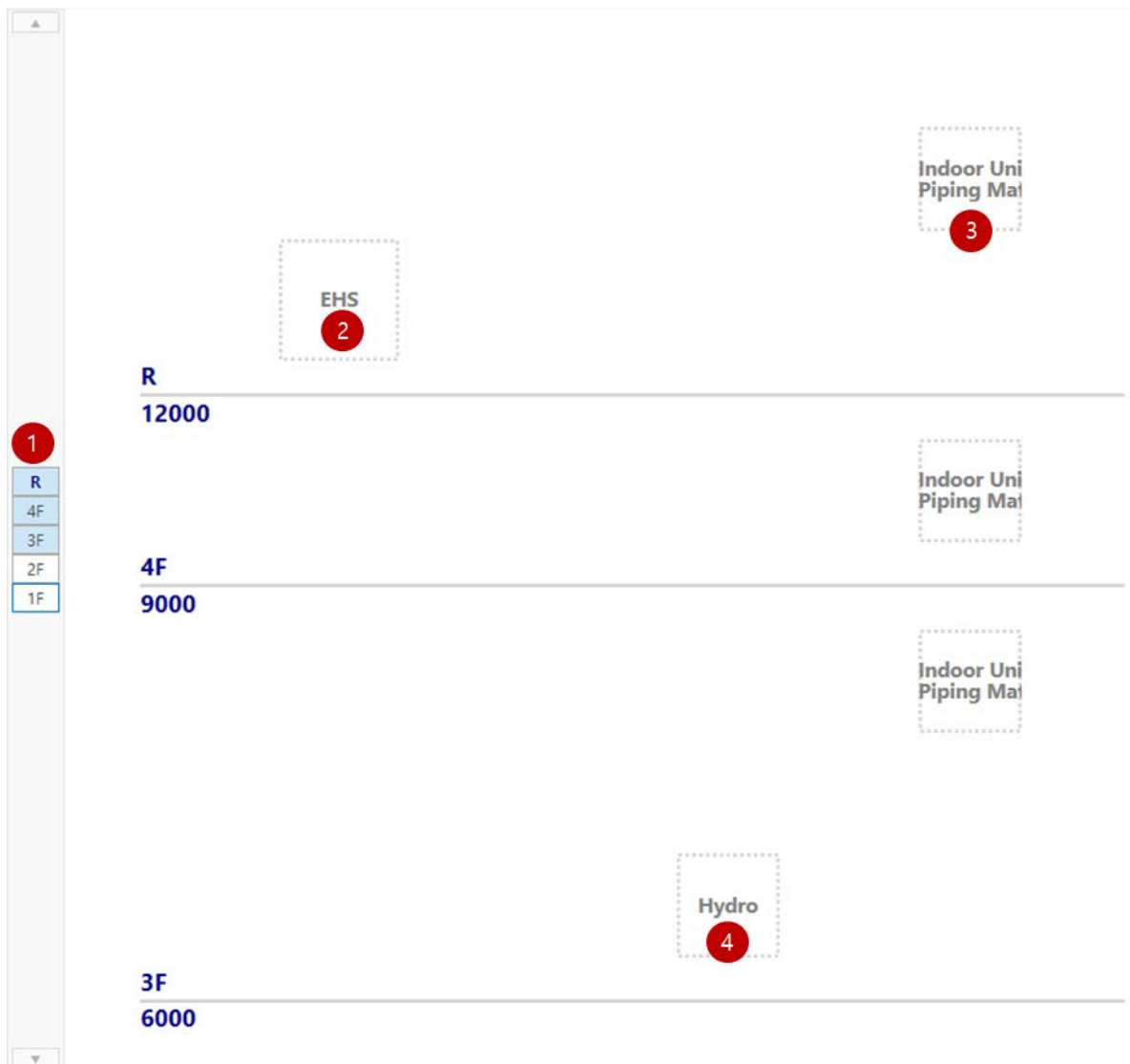
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Tank Indoor Unit Dummy : A Dummy for a Tank Indoor unit.

1.3.14. EHS Split Tank Excluded



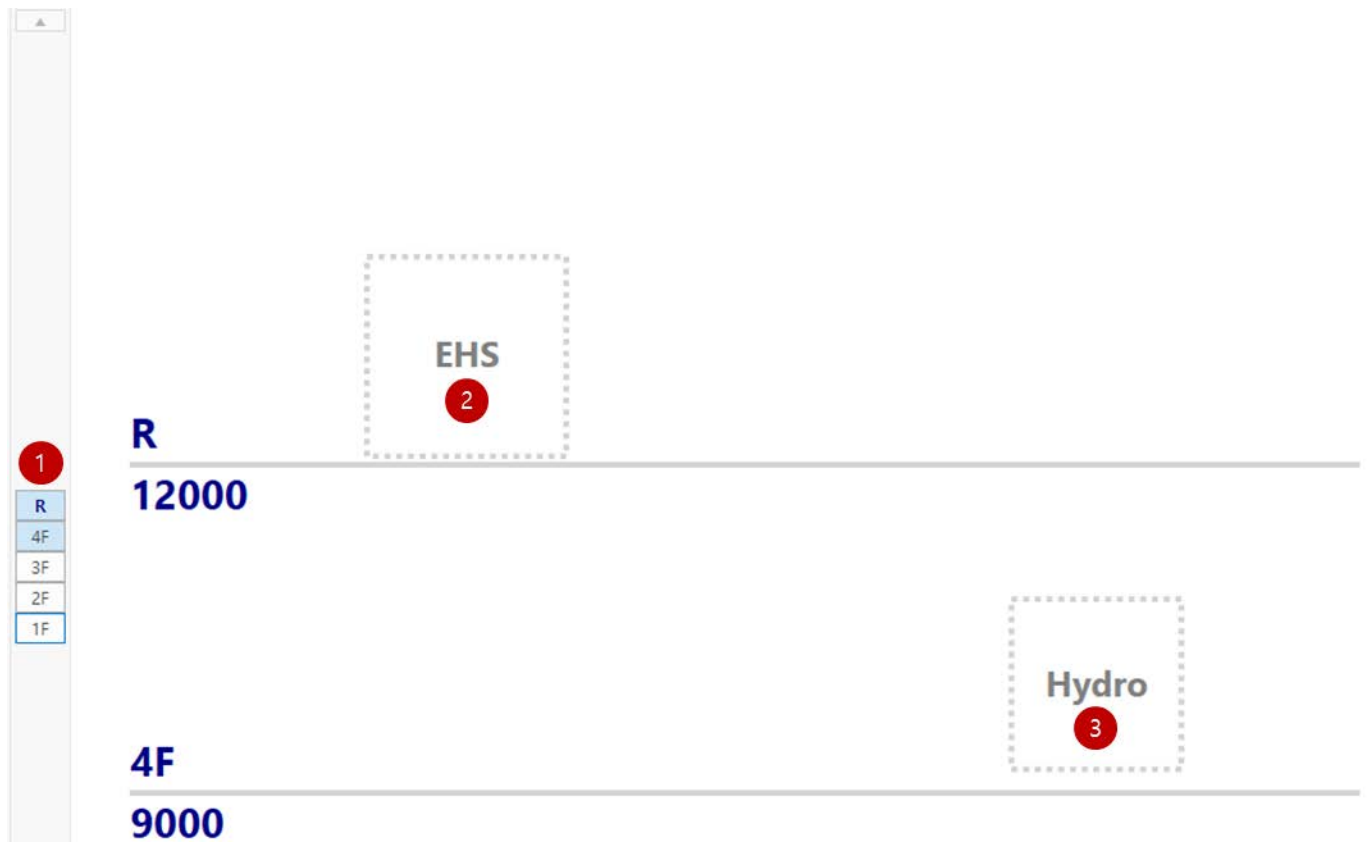
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Hydro Indoor Unit Dummy : A Dummy for a Hydro Indoor unit.

1.3.15. EHS TDM Plus Air to Air Indoor Unit Included



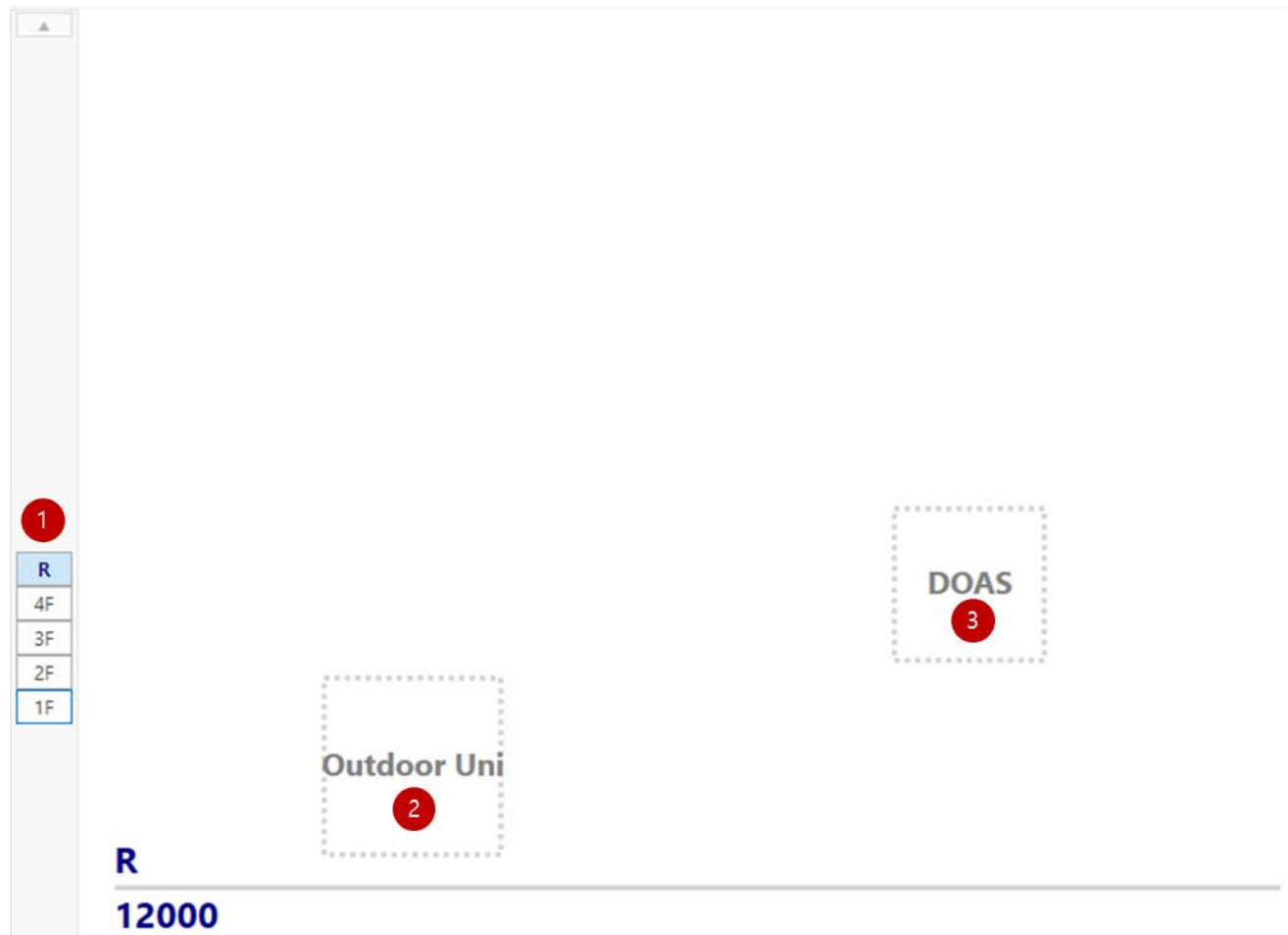
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Indoor Unit/Piping Material Dummy : A Dummy for Indoor unit and Piping Material. It cannot be moved.
- ④ Hydro Indoor Unit Dummy : A Dummy for a Hydro Indoor unit.

1.3.16. EHS TDM Plus Air to Air Indoor Unit Excluded



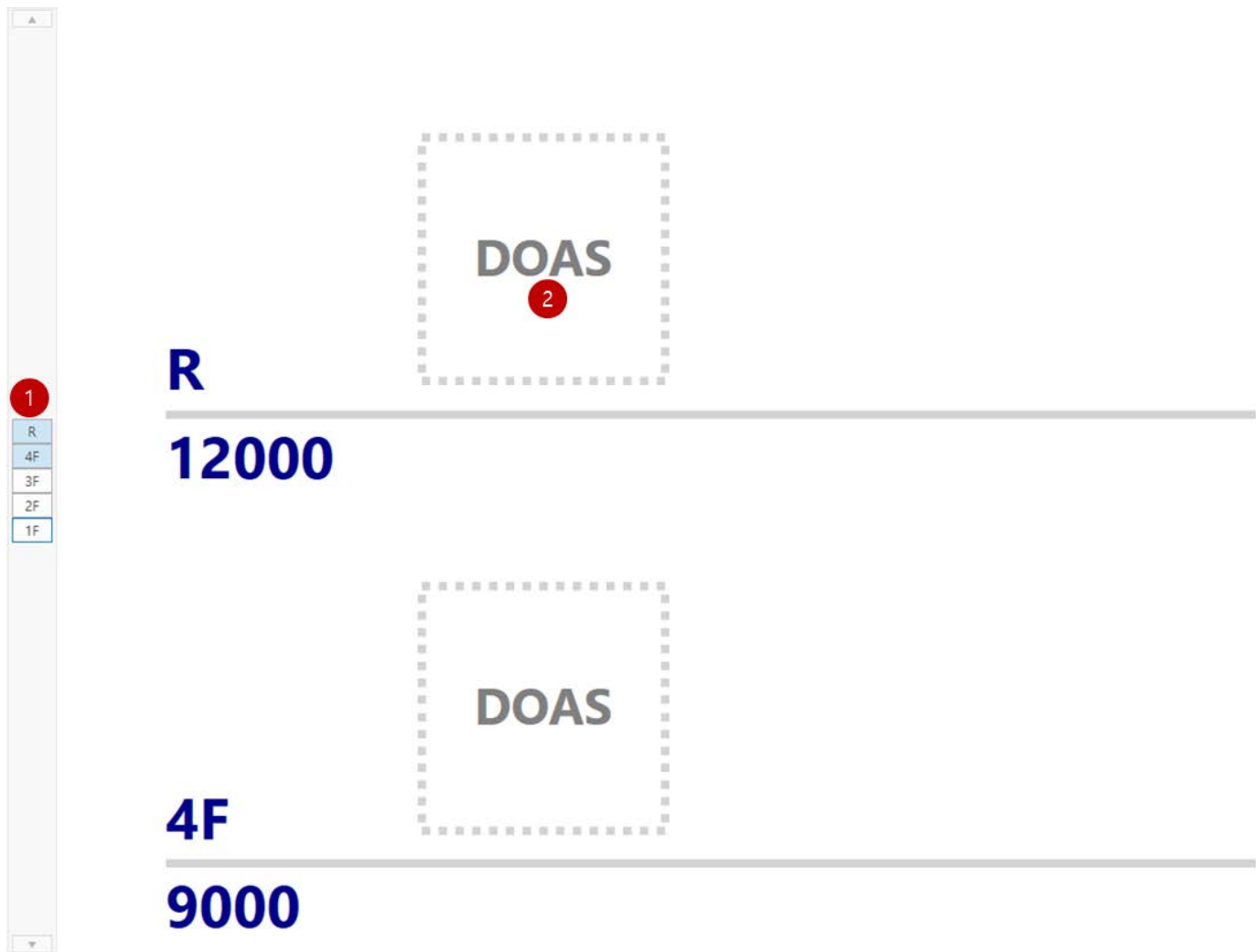
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Hydro Indoor Unit Dummy : A Dummy for a Hydro Indoor unit.

1.3.17. Ventilation Split DOAS



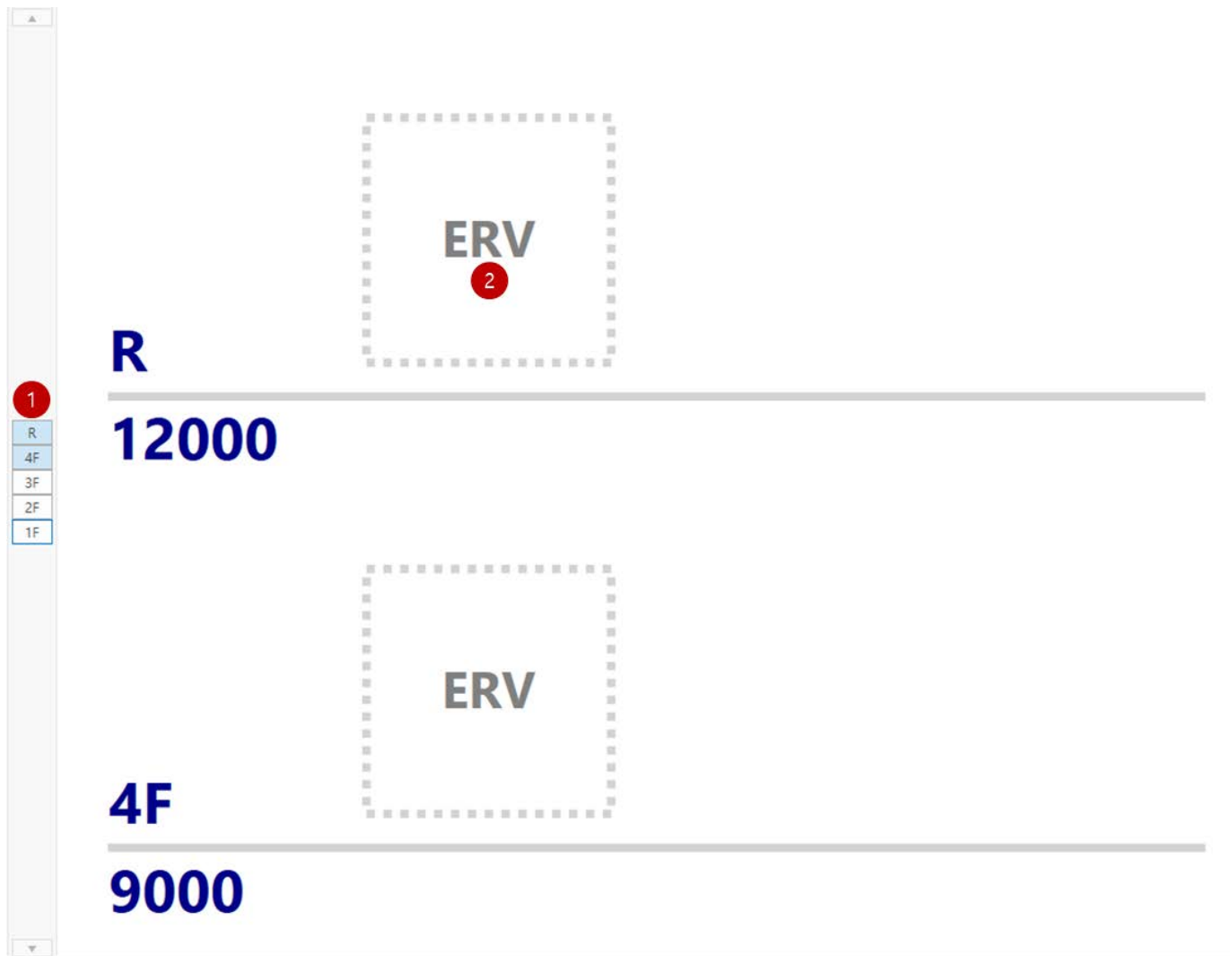
- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ DOAS Indoor Unit Dummy : A Dummy for a Split DOAS unit. If a DOAS Indoor unit is placed, the piping diagram is automatically configured.

1.3.18. Ventilation Packaged DOAS



- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② DOAS Indoor Unit Dummy : A Dummy for a Packaged DOAS unit.

1.3.19. Ventilation ERV

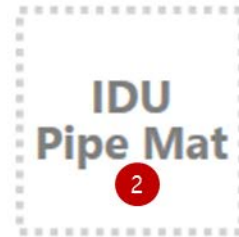


- ① Floors Bar : Activates or deactivates the floor on which equipment is to be designed. However, if the designed equipment is placed on the floor, you cannot deactivate the floor.
- ② ERV Indoor Unit : A Dummy for an ERV Indoor unit.

1.4. Non-Building Based Design

In the Non-Building Based Design, Equipment can be designed based on equipment and piping without space information. Space information is not displayed in the Equipment/Piping view. When switching to Building Based Design, all Equipment is placed on the lowest floor.

1.4.1. VRF General



- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Indoor Unit/Piping Material Dummy : A Dummy for an Indoor unit and Piping Material.

1.4.2. DVM Home(Single Piping)

Design the same as VRF General System.

1.4.3. DVM Home(Multi Piping)



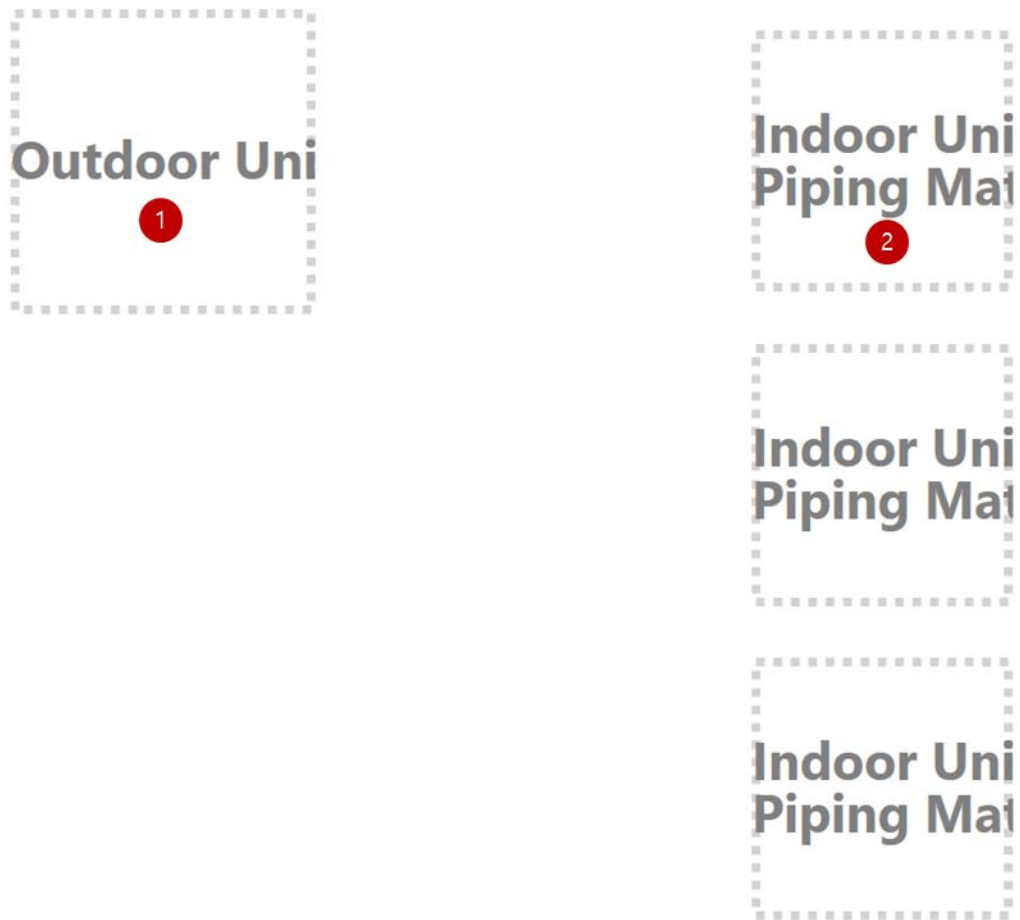
- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Indoor Unit Dummy : A Dummy for an Indoor unit.

1.4.4. Single CAC



- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Indoor Unit Dummy : A Dummy for an Indoor unit.

1.4.5. Single CAC (DPM)



- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Indoor Unit Dummy : A Dummy for an Indoor unit. If the Indoor unit is placed, the same Indoor unit model is automatically placed on all dummy.

1.4.6. PAC

Design the same as Single CAC System.

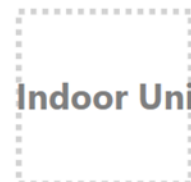
1.4.7. RAC

Design the same as Single CAC System.

1.4.8. FJM

1

7+9+12



- ① Indoor Unit Index : The capacity index combination of Indoor units for the system.
- ② Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ③ Indoor Unit Dummy : A Dummy for an Indoor unit.

1.4.9. Chiller Only



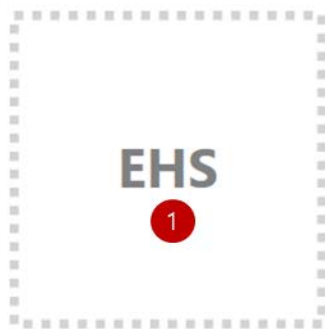
- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.

1.4.10. Chiller + AHU/FCU



- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
② AHU/FCU Indoor Unit Dummy : A Dummy for an AHU and FCU Indoor unit.

1.4.11. EHS Mono Tank Included



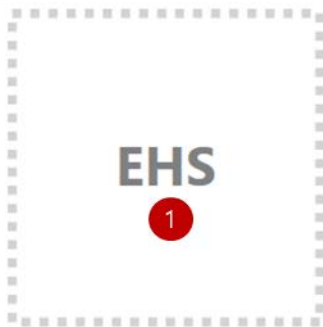
- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Tank Indoor Unit Dummy : A Dummy for a Tank Indoor unit.

1.4.12. EHS Mono Tank Excluded



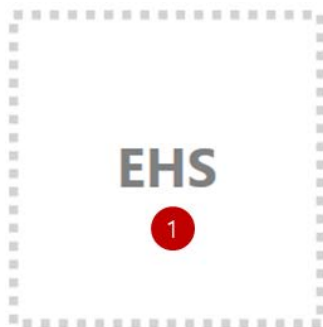
- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.

1.4.13. EHS Split Tank Included



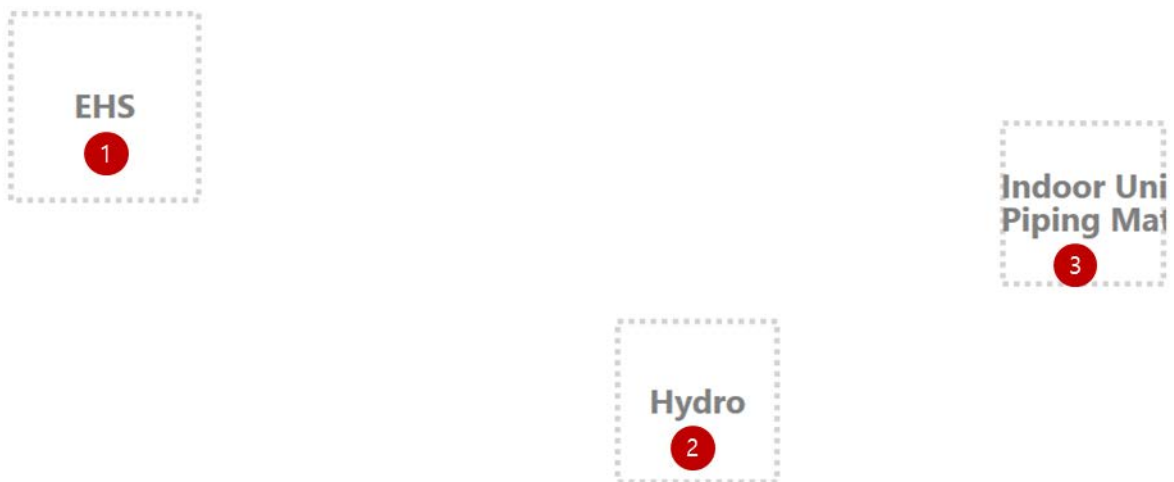
- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Tank Indoor Unit Dummy : A Dummy for a Tank Indoor unit.

1.4.14. EHS Split Tank Excluded



- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Hydro Indoor Unit Dummy : A Dummy for a Hydro Indoor unit.

1.4.15. EHS TDM Plus Air to Air Indoor Unit Included



- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Hydro Indoor Unit Dummy : A Dummy for a Hydro Indoor unit.
- ③ Indoor Unit/Piping Material Dummy : A Dummy for an Indoor unit and Piping Material.

1.4.16. EHS TDM Plus Air to Air Indoor Unit Excluded



- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② Hydro Indoor Unit Dummy : A Dummy for a Hydro Indoor unit.

1.4.17. Ventilation Split DOAS



- ① Outdoor Unit Dummy : A Dummy for an Outdoor unit.
- ② DOAS Indoor Unit Dummy : A Dummy for a Split DOAS unit. If a DOAS Indoor unit is placed, the piping diagram is automatically configured.

1.4.18. Ventilation Packaged DOAS



- ① DOAS Indoor Unit Dummy : A Dummy for a Packaged DOAS unit.

1.4.19. Ventilation ERV



- ① ERV Indoor Unit : A Dummy for an ERV Indoor unit.