HVAC Tutorial

Place Fittings

Version 2014

PART OF HEXAGON

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SESSION 4

Place Fittings

Objective

By the end of this session, you will be able to:

- Place fittings such as elbows and tees in a ductwork.

Before Starting this Procedure

- SP3D Overview
- SP3D Common Sessions
- Routing a Duct

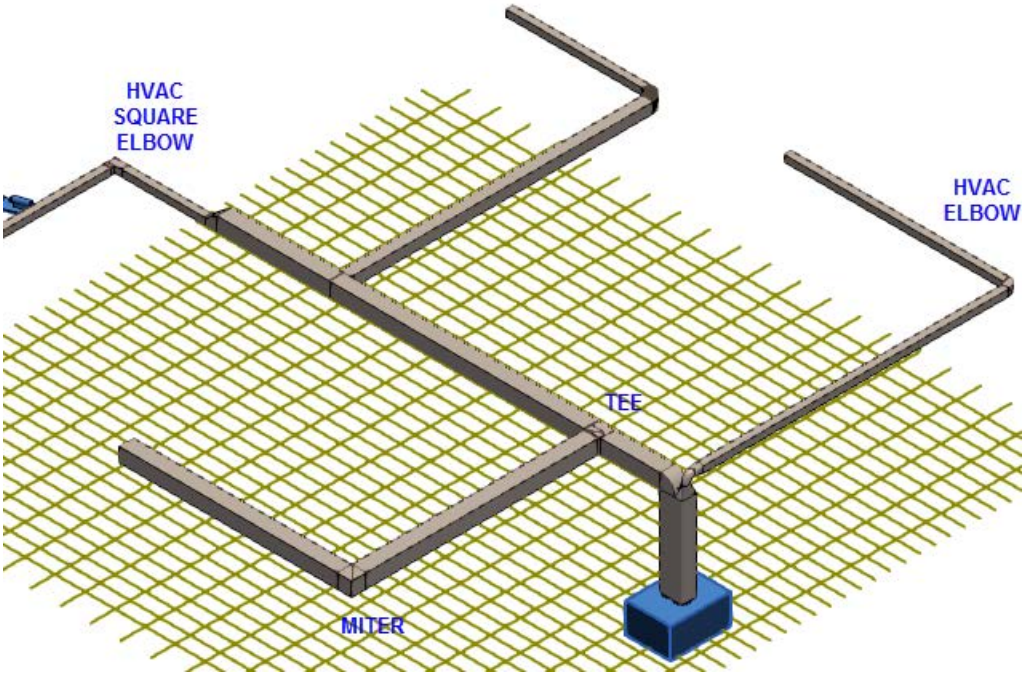
Overview

Fittings can be inserted into an existing ductwork or added to the ends of existing duct paths. A typical way to do this is to use the **Insert In-Line Component** command. Because Smart 3D by default generates part geometry (metal sheet) by taking the cross-section shape and size during modeling, you can replace these parts (metal sheet) with Catalog items. The part that results from the replace method is a Catalog item that can be purchased. These items are generally reported on a Material Take off Report for purchasing.

In this session, because a typical ductwork is already routed, you will learn the procedure to place the following fittings using the replace method.

- Tee
- HVAC elbow
- HVAC Square elbow

- Miter elbow

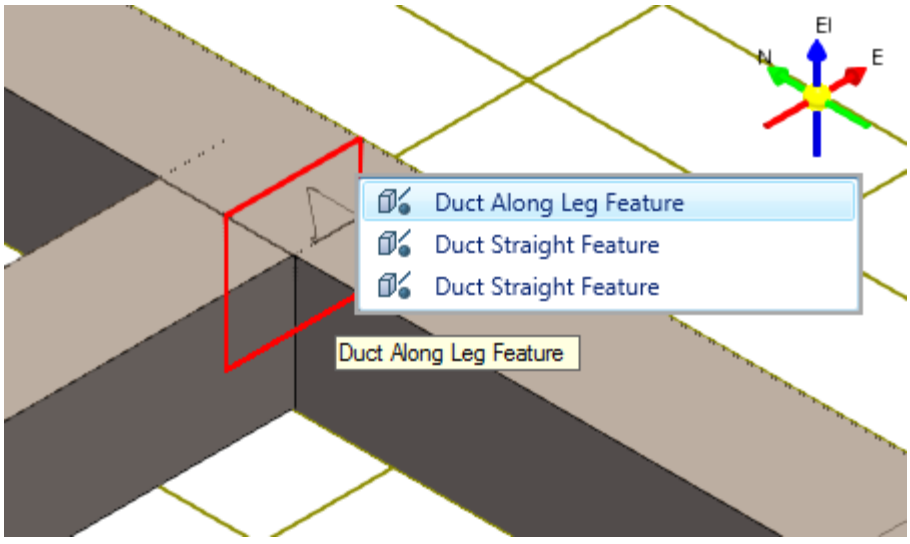


Place a Fitting

Place a **Rectangular Tee** fitting at an intersection between two duct paths.

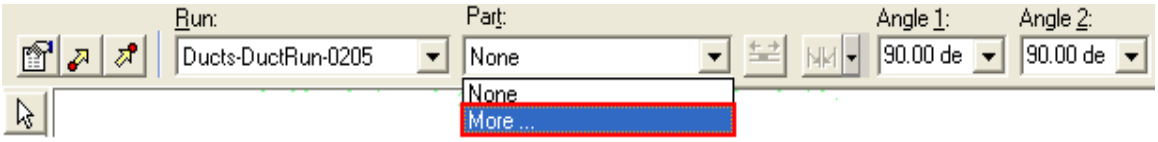
Before placing the fitting, ensure that you define the workspace to include **Unit U06**, activate the HVAC task, and select **HVAC_CS** as the coordinate system. Activate **PinPoint**, set the target to origin, and change **Locate Filter** to **Duct Features**.

1. Select the **Duct Along Leg Feature** located at the intersection between the two duct paths. Use **QuickPick** to help you select the **Duct Along Leg Feature**.



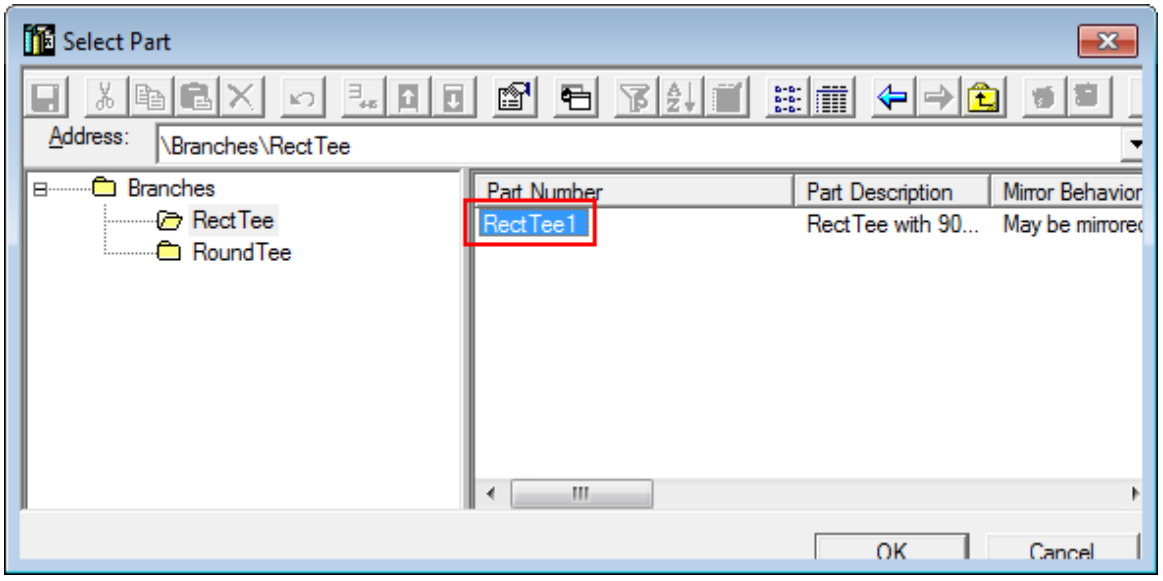
*The **Duct Feature** ribbon displays.*

2. Select **More** from the **Part** list.



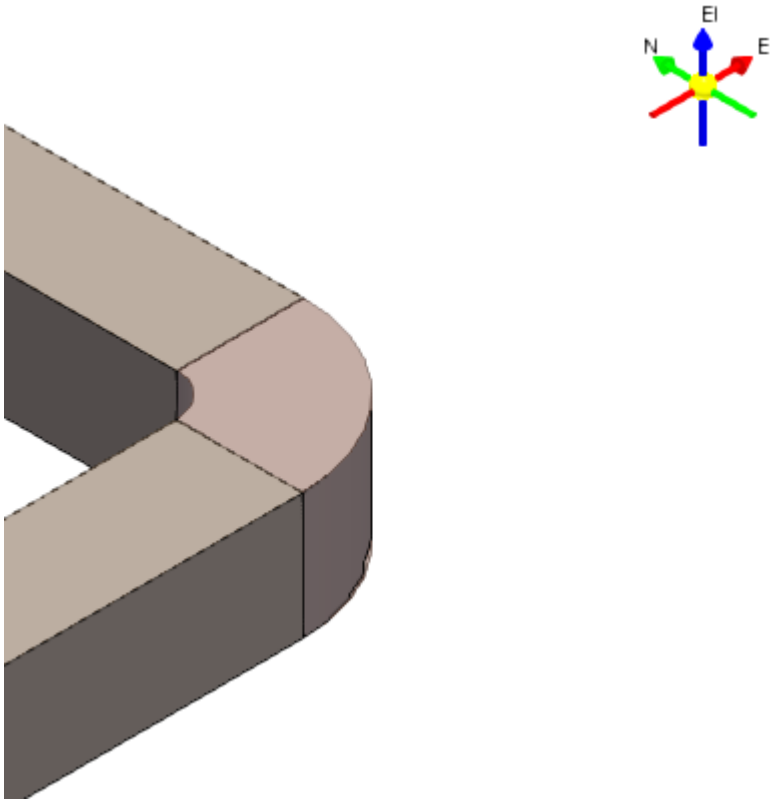
*The **Select Part** dialog box displays.*

3. Expand **Branches > RectTee** to select **RectTee1**.



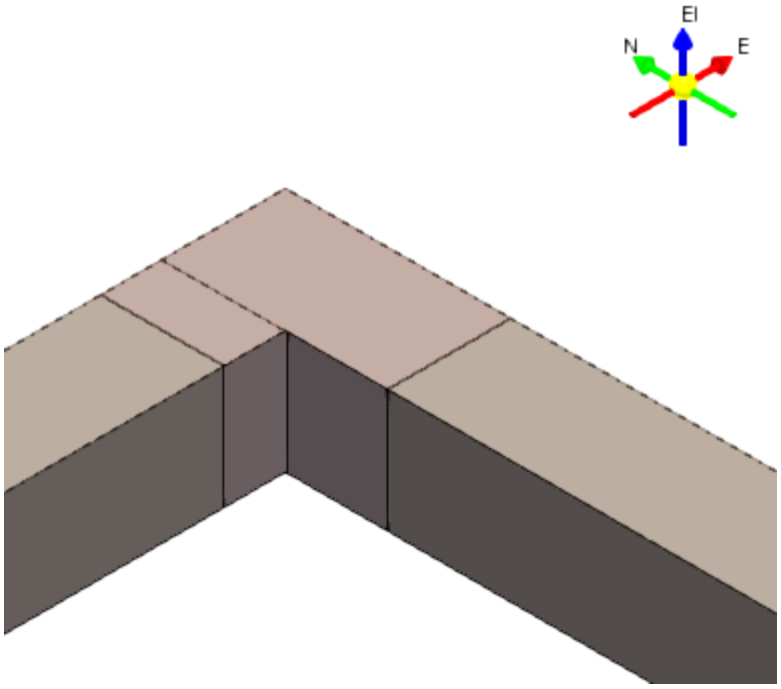
4. Click **OK**.
5. Click in the graphic view to place the tee.

6. Place an HVAC elbow fitting. Select the turn feature to be inserted by the HVAC elbow, and then select the **HVACElbow** part under **\Turns\HVACElbow** from the Catalog.

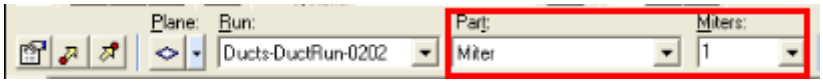


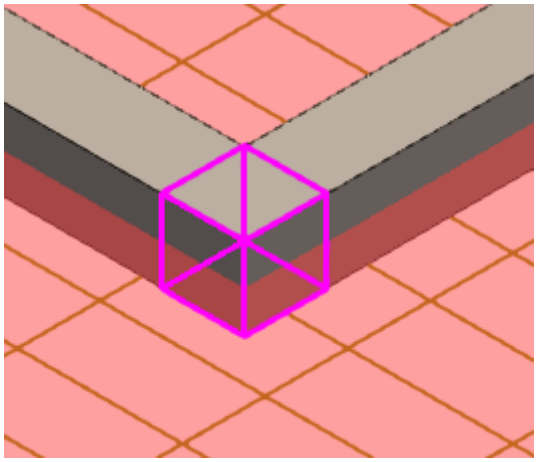
7. Perform the same steps that you performed for placing a rectangular tee fitting and select the **HVACsqrThroatElbow01** part to place an HVAC square-throat elbow.

TIP The **HVACsqrThroatElbow01** part is located under the **\Turns\HsqrThroatElbow** node.



8. Place a miter elbow. Select **Miter** as the part type, and then specify the number of **Miters** as **1** on the **Duct Feature** ribbon.





For more information related to inserting fittings, see the **HVACUsersGuide.pdf** file.