



## **Learn to use (3) 3skeng Channel (ver.1.0)**

This document contains all scene texts of the SketchUp file in case you have problems to fit the text on your screen.

### **Scene "Learn to use Channel"**

#### **How-to use this file:**

Click on the next scene "1-Straight Channel" to start.

Follow the description step-by-step (lines starting with "\*" require action from you) and feel free to align the predefined view to fit your screen resolution and preference.

When successfully finished, click on the next scene and repeat until the last scene. It may be helpful to click on this scene "Learn to use Channel" for reference.

In the end, your design should look similar as shown below.

## Scene "1-Straight Channel"

1) Click on the "Channel tool" in the 3skeng toolbar.

2) Select the direction of the first pipeline segment:

\* hover over the red axis and click.

Info: Main axes are highlighted in the specific colors.

3) Select type of pipeline segment:

\* Click "Generate straight channels".

4) Move along the ruler to select the width

or enter the value with the keyboard:

\* select "800 mm" with either method.

5) Move along the ruler to select the height

or enter the value with the keyboard:

\* select "400 mm" with either method.

6) Move along the ruler to select the length

or enter the value with the keyboard:

\* select "1000 mm" with either method.

Info: One side of the ruler is always set to "inch",

the other side uses the drawing unit (this drawing is "mm").

## Scene "2-Straight Tee"

- 1) If not still active, click on the "Channel tool" in the 3skeng toolbar.
- 2) \* Hover over the end of the straight piece and click.  
Select type of pipeline segment:  
\* Click "Select a T-Piece".
- 3) Move along the ruler to select the length of the tee segment  
or enter the value with the keyboard:  
\* select "800 mm" with either method.
- 4) Select the orientation of the outlet with the degree selection  
or enter the value with the keyboard:  
\* select "180°" (highlighted blue like main axis) with either method.
- 5) Move along the ruler to select the width of the outlet  
or enter the value with the keyboard:  
\* select "400 mm" with either method.
- 6) Move along the ruler to select the height of the outlet  
or enter the value with the keyboard:  
\* select "250 mm" with either method.
- 7) Move along the ruler to select the length of the outlet  
or enter the value with the keyboard:  
\* select "500 mm" with either method.

## Scene "3-Reducer to round"

- 1) If not still active, click on the "Channel tool" in the 3skeng toolbar.
- 2) \* Hover over the end of the outlet of the tee piece and click.  
Select type of pipeline segment:  
\* Click "Select a Reducer".
- 3) Move along the ruler to select the length  
or enter the value with the keyboard:  
\* select "400 mm" with either method.
- 4) Select type of reducer in client window:  
\* "Reducer to round (right)".
- 5) Select material and standard in library register:  
\* "Ventilation and Exhaust Duct" => "Metric Steel Ductwork".
- 6) Move along the line to select the diameter of the reducer end  
or enter the value with the keyboard.  
\* select "250 mm" with either method.
- 7) Select reducer orientation for the width axis.  
Option: The highlighted pins show concentric (middle)  
and the two straight eccentric orientations.  
You may also select any other configuration.  
\* select "0 mm (middle)" with either method.
- 8) Select reducer orientation for the height axis.  
Option: The highlighted pins show concentric (middle)  
and the two straight eccentric orientations.  
You may also select any other configuration.  
\* select "0 mm (middle)" with either method.

## Scene "4-Reducer to square"

- 1) If not still active, click on the "Channel tool" in the 3skeng toolbar.
- 2) \* Hover over the end of the tee piece and click.  
Select type of pipeline segment:  
\* Click "Select a Reducer".
- 3) Move along the ruler to select the length  
or enter the value with the keyboard:  
\* select "600 mm" with either method.
- 4) Select type of reducer in client window:  
\* "Reducer to square (left)".
- 5) Move along the ruler to select the width of the reducer end  
or enter the value with the keyboard:  
\* select "400 mm" with either method.
- 6) Move along the ruler to select the height of the reducer end  
or enter the value with the keyboard:  
\* select "250 mm" with either method.
- 7) Select reducer orientation for the width axis.  
Option: The highlighted pins show concentric (middle)  
and the two straight eccentric orientations.  
You may also select any other configuration.  
\* select "-200 mm (left)" with either method.
- 8) Select reducer orientation for the height axis.  
Option: The highlighted pins show concentric (middle)  
and the two straight eccentric orientations.  
You may also select any other configuration.  
\* select "75 mm (top)" with either method.

## Scene "5-Elbow"

- 1) If not still active, click on the "Channel tool" in the 3skeng toolbar.
- 2) \* Hover over the end of the reducer to square and click.  
Select type of pipeline segment:  
\* Click "Select the direction and an elbow".
- 3) Select type of elbow in client window:  
"round elbow" or "square knee":  
\* "round elbow".
- 4) Select the orientation of the elbow by  
moving the mouse over the degree selection  
or entering the value with the keyboard:  
\* select "180°".
- 5) Select the elbow opening angle between 0 and 90 degree by  
moving the mouse over the degree selection  
or entering the value with the keyboard:  
\* select "90°".
- 6) Select the elbow bending radius.  
You can use the pre-defined snap points  
(set between 0.5 and 2,5 times the elbow diameter)  
or enter a free value with the keyboard:  
\* select "r/d=1,5".

## Scene "6-Channel-Elbow"

- 1) If not still active, click on the "Channel tool" in the 3skeng toolbar.
- 2) \* Hover over the end of the elbow and click.  
Select type of pipeline segment:  
\* Click "Select an elbow and generate a channel".
- 3) Select type of elbow in client window:  
"round elbow" or "square knee":  
\* "square knee".
- 4) Select the orientation of the elbow by  
moving the mouse over the degree selection  
or entering the value with the keyboard:  
select "180°".  
Option: A double-click to confirm the degree selection  
will take over the configuration of the last elbow.
- 5) Select the length of the whole pipe-elbow combination.  
The total length is the intersection of the pipe's centerline  
and the centerline of the elbow outlet:  
select "1500 mm".