

# RevitWorks Door Factory Specification

For Door Factory 2015 onwards



## Subcategories Used

Doors	
Arrow	-Symbolic directional plan/elevation arrows for sliding doors
Elevation Swing	-Symbolic lines in elevation to show the swing direction
* Frame/Mullion	-Frames to framed doors (ie: Aluminium framed glass doors)
Furniture	-Handles, glass patches, kickplates etc
* Glass	-All glass within doors
Head Components	-Pelmets etc. On separate subcategory so one can turn off in floor plans
* Hidden Lines	
Jamb	-The door jamb
* Opening	
* Panel	-The door panel (except for glass doors)
Plan Panel	-Symbolic panel lines in plan
Plan Swing	-Symbolic swing lines in plan
Sill Components	-On separate subcategory so can turn off in ceiling plans
Trim	-Architrave, casing, mouldings etc around the door opening

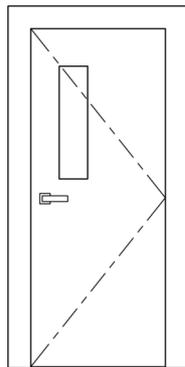
\* = Revit OOTB subcategories (Revit subcategories that cannot be deleted)

## Detail Levels



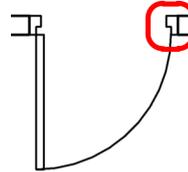
3d views:  
Coarse  
Medium  
Fine

Use visibility graphics door subcategories to turn components off and on as required.

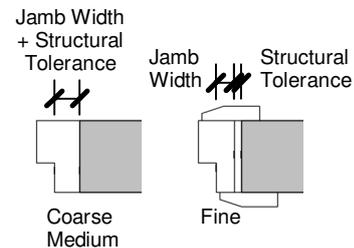


Elevations:  
Coarse  
Medium  
Fine

Use visibility graphics door subcategories to turn components off and on as required.



Plans:  
Coarse  
Medium  
Fine



## Shared Parameter Usage

Shared Parameters allow for additional usability compared to unshared parameters. Refer to Typical Door Type and Typical Door Instance Parameters (on the following pages) for complete lists of all shared and unshared parameters. RevitWorks door families shared parameters are as below:

### For Tagging and Scheduling:

Allows parameters to be within tags as well as scheduled. Includes:

- All type parameters under "Construction" group.
- All parameters under "Dimension" group.
- Major parameters under "Other" group:
  - Structural Tolerance
  - Jamb Width
  - Jamb Head Width
  - Jamb Depth
  - Doorstop Width

### For Consistency:

Allows families to be swapped with different families without an instance parameter changing back to its default value. Includes:

- All instance parameters under "Graphics" group (including "Swing Angle")
- All instance parameters under "Other" group (including alignment parameters)

### Calculation Parameters:

All parameters starting with "rw\_calc" are internal calculation parameters within the RevitWork families. Please do not amend them.

# RevitWorks Door Factory Specification

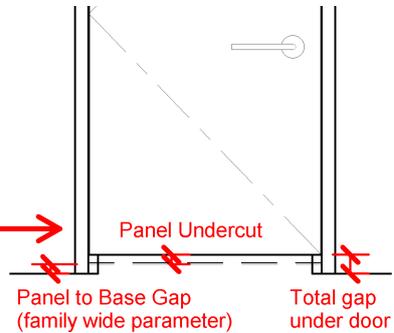


## Typical Door Instance Parameters

Example: Single Side Hinged Door

Show in 3d and elevations. Parameters appear only when the component exists.

Parameters appear only when the component exists. Extra Panel finish parameters appear for doors with secondary panels. Refer Typical Door Type Parameters for Panel, Furniture and Frame materials.



+ve = away from wall  
-ve = towards wall

Read only - dependant on instance parameter "Jamb Depth to Match Wall Width" and type parameter "Jamb Depth Specified".

## Alignment Variations

No Jamb:

Panel Offset from Wall Alignment	0.0
Align Panel with Wall Centreline	<input checked="" type="checkbox"/>
Align Panel with Interior Wall Face	<input type="checkbox"/>
Align Panel with Exterior Wall Face	<input type="checkbox"/>

Flat Jamb:

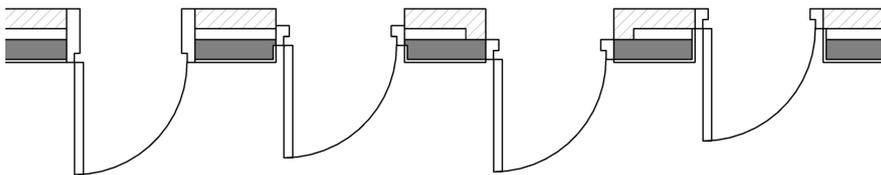
Jamb Offset from Wall Alignment	0.0
Jamb Depth to Match Wall Width	<input checked="" type="checkbox"/>
Align Panel with Jamb Interior Face	<input type="checkbox"/>
Align Panel with Jamb Exterior Face	<input type="checkbox"/>

Surface Slider Flat Jamb:

Panel Offset from Wall Face	25.0
Jamb Depth to Match Wall Width	<input checked="" type="checkbox"/>

Align Panel with Jamb Centreline	<input checked="" type="checkbox"/>
Align Jamb with Wall Centreline	<input checked="" type="checkbox"/>
Align Jamb with Interior Wall Face	<input type="checkbox"/>
Align Jamb with Exterior Wall Face	<input type="checkbox"/>

Note! All these jamb alignment values are only adjustable for jambs that adjoin the wall; they are not adjustable for jambs that wrap the wall.



## Graphic Variations

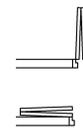
Double Doors

Swing Angle	90.000°
Secondary Swing Angle	90.000°

Bifold Doors

Swing Angle	90.000°
Layback One End	<input checked="" type="checkbox"/>
Layback Both Ends	<input checked="" type="checkbox"/>
Fold Angle	85.000°

Only when single door at end  
Only where 2 panel leaf at end



Stacking Doors

Show Plan Stacked	<input checked="" type="checkbox"/>
Show Plan Closed	<input checked="" type="checkbox"/>
Show 3d Panels	<input checked="" type="checkbox"/>

Allows for design options to show doors closed or open in plans, 3d views etc.

Sliding Doors

Plan Arrow Offset	125.0
Plan % Open	100

Pivot Doors

Swing Angle	90.000°
Plan Pivot Offset	60.0

Allows wider symbolic representation in plans

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# RevitWorks Door Factory Specification



## Typical Door Type Parameters

Example:  
Single Side Hinged Door

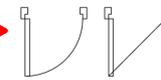
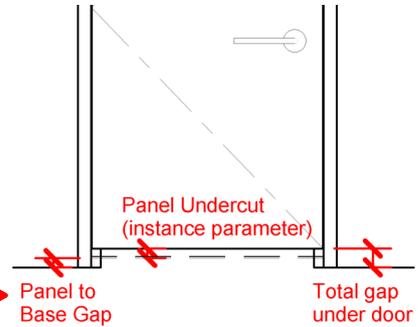
Parameter	Value
<b>Constraints</b>	
Panel to Jamb Gap Side2	3.5
Panel to Jamb Gap Side1	2.5
Panel to Head Gap	1.0
Panel to Doorstop Gap	1.0
Panel to Base Gap	5.0
<b>Construction</b>	
<b>Graphics</b>	
Curved Plan Swing	<input checked="" type="checkbox"/>
<b>Materials and Finishes</b>	
Panel Material	<By Category>
Jamb Material	<By Category>
Internal Furniture Material	<By Category>
External Furniture Material	<By Category>
<b>Dimensions</b>	
Thickness	40.0
Rough Width	876.0
Rough Height	2016.0
Panel Width	810.0
Panel Thickness	40.0
Panel Height	1980.0
Height	2016.0
Width	876.0
Clear Opening Width	752.5
<b>Identity Data</b>	
<b>IFC Parameters</b>	
<b>Analytical Properties</b>	
<b>Other</b>	
Structural Tolerance	10.0
Jamb Width	20.0
Jamb Protrusion Past Wall	0.0
Jamb Head Width to Match Jamb Width	<input checked="" type="checkbox"/>
Jamb Head Width Specified	20.0
Jamb Head Width	20.0
Jamb Depth Specified	100.0
Doorstop Width	20.0

Family Wide Parameters - edit family to change:  
Side1 = Latch/opening end  
Side2 = Hinge/closed end

= Rough Height and Rough Width to allow for consistency with curtain panel doors for scheduling (i.e. curtain panel doors don't have usable Rough Width or Rough Height parameters).

This parameter is only adjustable for jambs that wrap the wall.

Instance Parameter "Jamb Depth" equals this parameter if instance parameter "Jamb Depth to Match Wall Width" is not ticked.

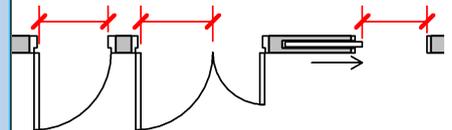


Parameters appear only when the component exists.

= Panel Thickness (OOTB parameter)

Rough Width = Panel Width(s) + Tolerances + Jamb Width\*2  
Rough Height = Panel Height + Tolerances + Jamb Width

For single and double leaf doors only: the clear dimension between the jamb and the (primary) panel when open:

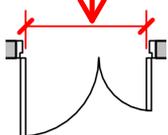


If "Jamb Head Width to Match Jamb Width" is ticked, "Jamb Head Width" equals "Jamb Width", if unticked, "Jamb Head Width" equals "Jamb Head Width Specified".

## Variations

### Double Doors:

Dimensions	
Thickness	40.0
Secondary Panel Width	410.0
Secondary Panel Thickness	40.0
Rough Width	1088.0
Rough Height	2016.0
Panel Width	610.0
Panel Height	1980.0
Height	2016.0
Width	1088.0
Clear Opening Width	571.0
Clear Opening Overall Width	941.0



### Pivot Doors:

Graphics	
Two Way Swing	<input type="checkbox"/>
Curved Plan Swing	<input checked="" type="checkbox"/>
Dimensions	
Thickness	40.0
Rough Width	876.0
Rough Height	2016.0
Pivot Offset	60.0
Panel Width	810.0
Panel Height	1980.0
Height	2016.0
Width	876.0
Clear Opening Width	732.5

### Multi Sliders, Multi Bifolds and Stacking Doors:

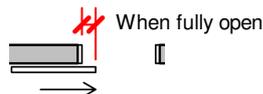
Other	
No of Panels	5

### Double 2 way Swing Doors (including double pivot doors)

Graphics	
Opposing Swings	<input type="checkbox"/>

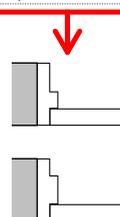
### Sliding Doors:

Dimensions	
Thickness	40.0
Rough Width	796.0
Rough Height	1990.0
Panel Width	810.0
Panel Protrusion into Opening	100.0
Panel Height	1980.0
Height	1990.0
Width	796.0
Clear Opening Width	636.0



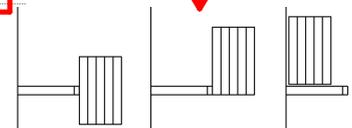
### Stop Jamb Doors

Other	
Jamb Protrusion Past Wall	0.0
Jamb Head Width Specified	20.0
Jamb Head Width to Match Jamb	<input checked="" type="checkbox"/>
Jamb Depth Specified	100.0
Doorstop Width	20.0
Doorstop Depth Specified	40.0
Doorstop Depth Centred on Jamb	<input type="checkbox"/>



### Stacking Doors:

Graphics	
Stack to Side	<input type="checkbox"/>
Stack Offset Across	0.0
Stack Offset Along	0.0
Stack Centred	<input checked="" type="checkbox"/>



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# RevitWorks Door Factory Specification



## Curtain Panel Door Differences

The differences between curtain panel doors and standard doors can be summarised as follows:

- Curtain panel door dimensions are always instance parameters. (i.e. they are dependant on the curtain panel size).
- Curtain panel doors can not report on the wall thickness they are embedded into.

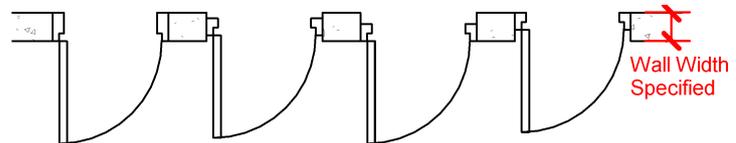
The RevitWorks curtain panel door parameters relate to, and improve these differences.

## Instance Parameter Differences

Refer to Typical Door Instance Parameters for full parameter lists

These parameters report the door's Rough Width and Rough Height (curtain panel doors don't come with real Rough Width or Rough Height parameters). These are consistent with the RevitWorks standard doors to allow for scheduling. (i.e. Width = Panel Width(s) + Tolerances + Jamb Width\*2. Height = Panel Height + Tolerances + Jamb Width)

Manually set for ease of use of alignment parameters. Also allows for "Jamb Depth to Match Wall Width" jamb depth override.



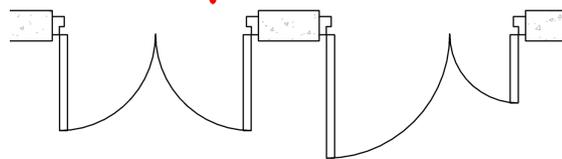
## Type Parameter Differences

Refer to Typical Door Type Parameters for full parameter lists

## Dimension Variations

Double Doors:

Dimensions	
Thickness	40.0
Secondary Panel Thickness	40.0
Panel Thickness	40.0
Non Equal Primary Panel Width	810.0
Equal Panels	<input checked="" type="checkbox"/>
Rough Width	
Rough Height	



These parameters are Revit system parameters that do not report any lengths and can not be linked to any other parameters. They are ignored by RevitWorks (unfortunately they can not be deleted).