RevitWorks Door Factory Spec's

Subcategories Used

Doors
- Arrow — -Symbolic directional plan/elevation arrows for sliding doors
- Clearance Diagram — -Clearance diagrams (in plan)
- 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 door panels
- 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 parts of the panel)
- 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
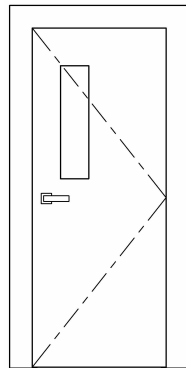- Trim — -Architrave, casing, mouldings etc around the door opening

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

Detail Levels

Jamb Width + Structural Tolerance
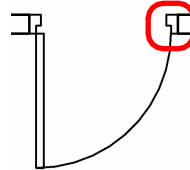
Jamb Width

Structural Tolerance

Coarse Medium

Fine

3d views:
Coarse
Medium
Fine

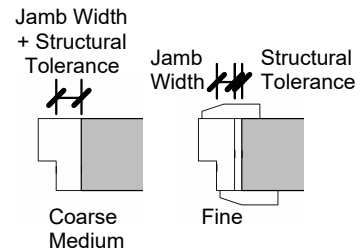Use visibility graphics door subcategories to turn components off and on as required.

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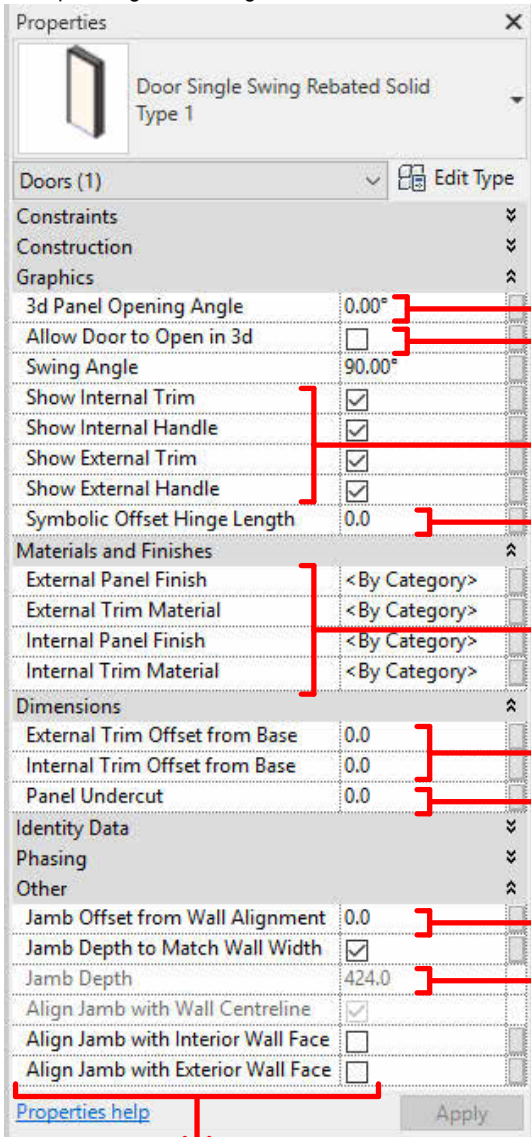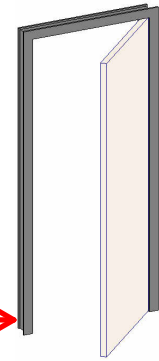- All instance parameters under "Other" group (including alignment parameters)

Calculation Parameters:
All parameters starting with "rw_calc" are internal calculation parameters within the RevitWork families. Please do not amend them.

RevitWorks Door Factory Spec's

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Typical Door Instance Parameters

Example: Single Side Hinged Door

Properties

Door Single Swing Rebated Solid Type 1

Doors (1) · Edit Type

Constraints	¥
Construction	¥
Graphics	¥
3d Panel Opening Angle	0.00°
Allow Door to Open in 3d	☐
Swing Angle	90.00°
Show Internal Trim	☑
Show Internal Handle	☑
Show External Trim	☑
Show External Handle	☑
Symbolic Offset Hinge Length	0.0
Materials and Finishes	¥
External Panel Finish	<By Category>
External Trim Material	<By Category>
Internal Panel Finish	<By Category>
Internal Trim Material	<By Category>
Dimensions	¥
External Trim Offset from Base	0.0
Internal Trim Offset from Base	0.0
Panel Undercut	0.0
Identity Data	¥
Phasing	¥
Other	¥
Jamb Offset from Wall Alignment	0.0
Jamb Depth to Match Wall Width	☑
Jamb Depth	424.0
Align Jamb with Wall Centreline	☑
Align Jamb with Interior Wall Face	☐
Align Jamb with Exterior Wall Face	☐

Properties help · Apply

Allows 3d panels to open if ticked: recommended to tie through to a global parameter to allow users to open and close all doors to suit their 3d scenes
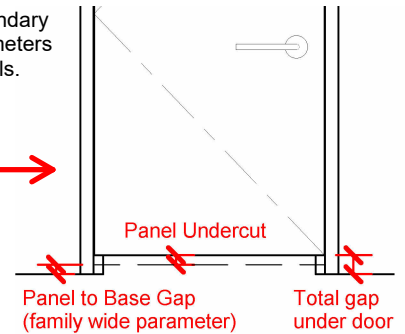
Parameters appear only when the component exists.
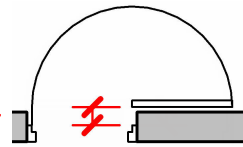
Offset hinges for hinge doors only

Parameters only appear 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.

Parameters only appear when the relevant trim exists.

+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".

Panel Undercut

Panel to Base Gap (family wide parameter) · Total gap under door

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

Alignment Variations

No Jambs:

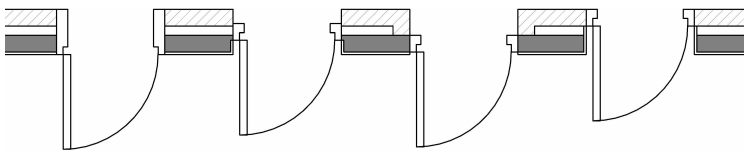| Panel Offset from Wall Alignment | 0.0 |
Align Panel with Wall Centreline	☑
Align Panel with Interior Wall Face	☐
Align Panel with Exterior Wall Face	☐

Surface Slider Flat Jambs:

| Panel Offset from Wall Face | 25.0 |
| Jamb Depth to Match Wall Width | ☑ |

Flat Jambs:

Jamb Offset from Wall Alignment	0.0
Jamb Depth to Match Wall Width	☑
Align Panel with Jamb Interior Face	☐
Align Panel with Jamb Exterior Face	☑
Align Panel with Jamb Centreline	☐
Align Jamb with Wall Centreline	☐
Align Jamb with Interior Wall Face	☑
Align Jamb with Exterior Wall Face	☐

Graphic Variations

Double Doors

| Swing Angle | 90.000° |
| Secondary Swing Angle | 90.000° |

Bifold Doors

Swing Angle	90.000°
Layback One End	☑
Layback Both Ends	☑
Fold Angle	85.000°

Only when single door at end

Only where 2 panel leaf at end

Stacking Doors

| Show Plan Stacked | ☑ |
| Show Plan Closed | ☑ |

Allows for design options to show doors closed or open in plans

Sliding Doors

| Plan Arrow Offset | 125.0 |
| Plan % Open | 100 |

Pivot Doors

| Swing Angle | 90.000° |
| Plan Pivot Offset | 60.0 |
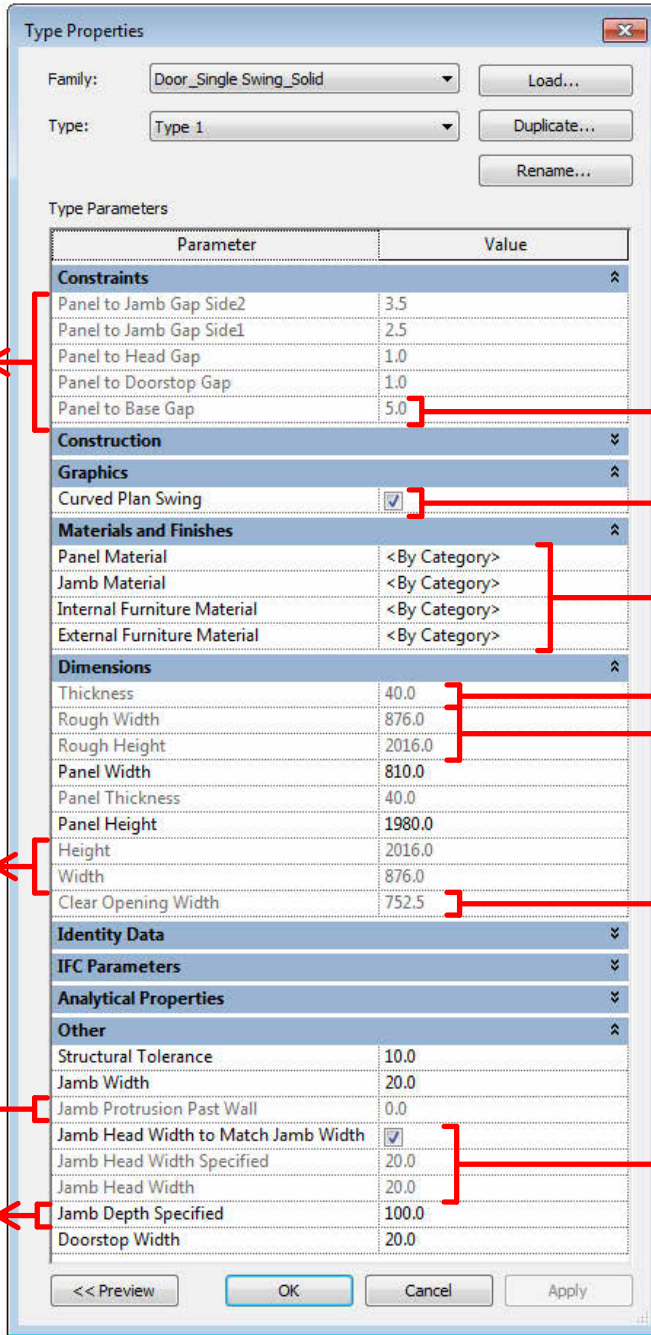
Allows wider symbolic representation in plans

Content that works

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RevitWorks Door Factory Spec's

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Typical Door Type Parameters

Example:
Single Side Hinged
Door

Type Properties

Family: Door_Single Swing_Solid [Load...]

Type: Type 1 [Duplicate...] [Rename...]

Type Parameters

Parameter	Value
Constraints	
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
Construction	
Graphics	
Curved Plan Swing	☑
Materials and Finishes	
Panel Material	<By Category>
Jamb Material	<By Category>
Internal Furniture Material	<By Category>
External Furniture Material	<By Category>
Dimensions	
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
Identity Data	
IFC Parameters	
Analytical Properties	
Other	
Structural Tolerance	10.0
Jamb Width	20.0
Jamb Protrusion Past Wall	0.0
Jamb Head Width to Match Jamb Width	☑
Jamb Head Width Specified	20.0
Jamb Head Width	20.0
Jamb Depth Specified	100.0
Doorstop Width	20.0

[<< Preview] [OK] [Cancel] [Apply]

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 (Ie. 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.

Panel Undercut (instance parameter)

Panel to Base Gap / Total gap under door
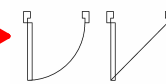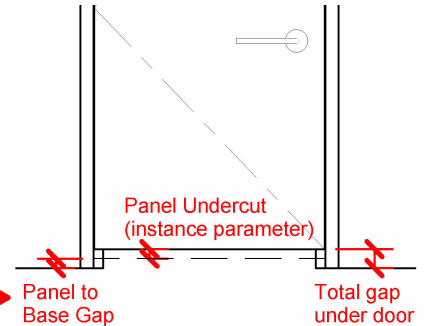
Parameters appear only when the component exists.

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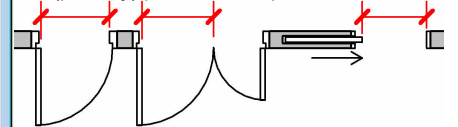
If "Jamb Head Width to Match Jamb Width" is ticked, "Jamb Head Width" equals "Jamb Width", if unticked, "Jamb Head Width" equals "Jamb Head Width Specified".

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
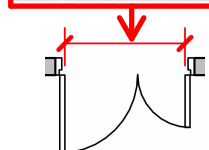
Pivot Doors:

Graphics	
Two Way Swing	☐
Curved Plan Swing	☑
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	☐

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

When fully open
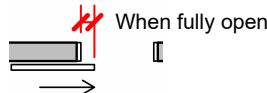
Stop Jamb Doors

Other	
Jamb Protrusion Past Wall	0.0
Jamb Head Width Specified	20.0
Jamb Head Width to Match Jamb	☑
Jamb Depth Specified	100.0
Doorstop Width	20.0
Doorstop Depth Specified	40.0
Doorstop Depth Centred on Jamb	☐
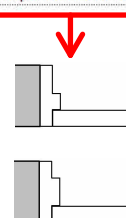
Stacking Doors:

Graphics	
Stack to Side	☐
Stack Offset Across	0.0
Stack Offset Along	0.0
Stack Centred	☑

Content that works

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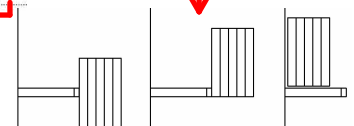
# RevitWorks Door Factory Spec's

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.
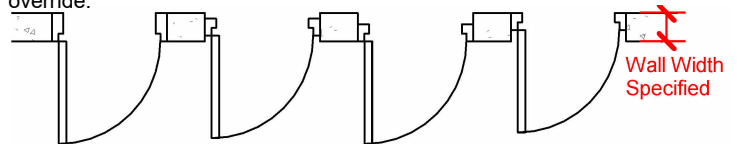
Instance Parameter Differences
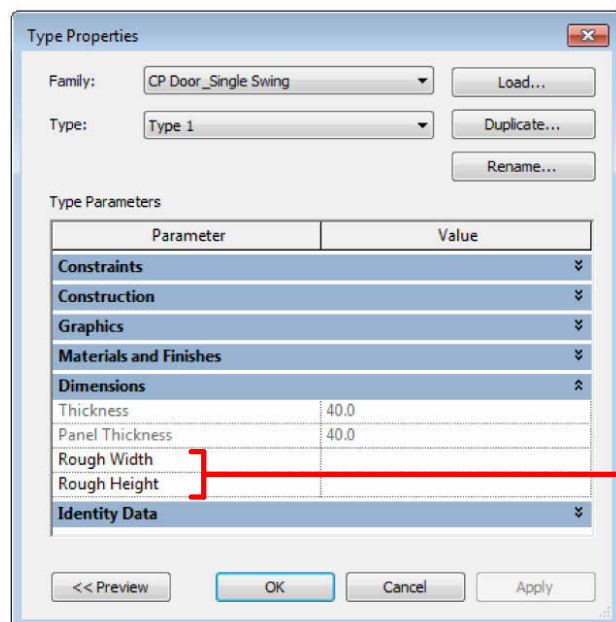Refer to Typical Door Instance Parameters for full parameter lists
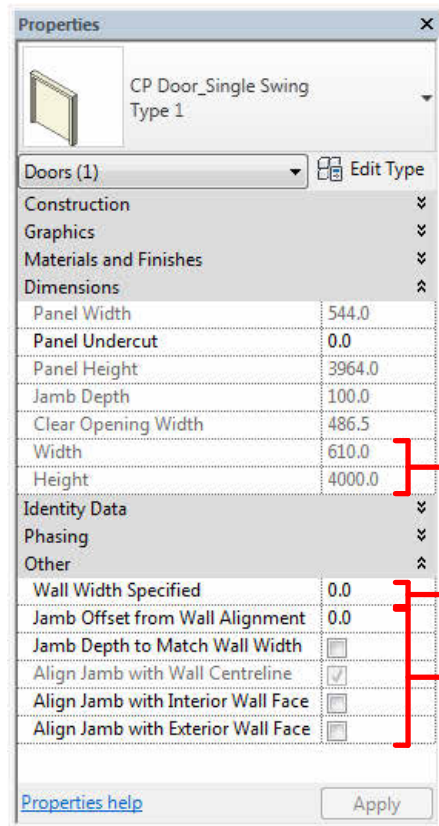
These parameters report the door's Rough Width and Rough Height (curtain panel doors don't come with real Rough Width or Rough Height parameters). These are consistent with the RevitWorks standard doors to allow for scheduling. (i.e. Width = Panel Width(s) + Tolerances + Jamb Width*2. Height = Panel 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.

Wall Width Specified

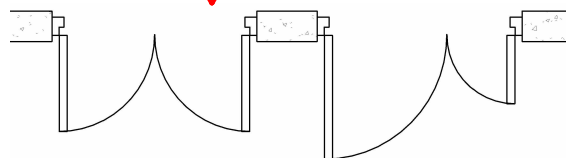## Type Parameter Differences

Refer to Typical Door Type Parameters for full parameter lists

Dimension Variations

Double Doors:

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).

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