

## Hafele MX User Guide.



### Introduction

#### Overview

- The 'Hafele MX Drawer Package' from Solid Setup adds the Hafele MX drawers to Cabinet Vision Solid.
- It provides drilling for the drawer box parts, the cabinet ends and the drawer front for CNC output.
- You can select **Round Rails, Rectangular Rails, Side Panels or Glass Sides**.
- A 2<sup>nd</sup> Gallery can be added.
- Drawer box back height can be increased by attribute.
- It also adds 3d graphics for the drawer sides, runners, galleries and brackets etc.
- All Hafele KITS with order codes are added for ordering.
- The runners and brackets etc. are added as separate parts and materials for reporting purposes.
- All material descriptions contain the Hafele order number after the # symbol.

### Included in This Package

#### Drawer Guide Schedules

- |                      |                                |
|----------------------|--------------------------------|
| • "HAF MX White 30"  | MX White with 30Kg guides      |
| • "HAF MX White 50"  | MX White with 50Kg guides      |
| • "HAF MX White 70"  | MX White with 70Kg guides      |
| • "HAF MX Silver 30" | MX Silver with 30Kg guides     |
| • "HAF MX Silver 50" | MX Silver with 50Kg guides     |
| • "HAF MX Silver 70" | MX Silver with 70Kg guides     |
| • "HAF MX Anth 30"   | MX Anthracite with 30Kg guides |
| • "HAF MX Anth 50"   | MX Anthracite with 50Kg guides |
| • "HAF MX Anth 70"   | MX Anthracite with 70Kg guides |
| • "HAF MX Bronze 30" | MX Bronze with 30Kg guides     |
| • "HAF MX Bronze 50" | MX Bronze with 50Kg guides     |
| • "HAF MX Bronze 70" | MX Bronze with 70Kg guides     |

## Drawer Guide Materials:

Colour				Weight	Height	Profile	Back	270	300	350	400	450	500	550	600	650
White	Sil	Anth	Bnz	30kg	60	60	53									
White	Sil	Anth	Bnz	30kg	Std	92	69	270	300	350	400	450	500	550		
White	Sil	Anth	Bnz	30kg	POT	92	157	270	300	350	400	450	500	550		
White	Sil	Anth	Bnz	50kg	60	60	53				400	450	500	550		
White	Sil	Anth	Bnz	50kg	Std	92	69	270	300	350	400	450	500	550	600	650
White	Sil	Anth	Bnz	50kg	POT	92	157	270	300	350	400	450	500	550	600	650
White	Sil	Anth	Bnz	70kg	60	60	53									
White	Sil	Anth	Bnz	70kg	Std	92	69							550	600	650
White	Sil	Anth	Bnz	70kg	POT	92	157							550	600	650

## User Created Standards

The Following UCS's are provided (ensure they are in this order once installed):

- { DRAWS } -- Hafele MX ID's Identifies MX drawer guide materials.
- { DRAWS } -- Hafele MX Attributes Adds Attributes to drawer backs.
- { DRAWS } -- Hafele MX Hole Masking Deletes unwanted holes from drawer fronts.
- { DRAWS } -- Hafele MX Runners Adds the drawer profiles and drawer guides
- { DRAWS } -- Hafele MX Brackets Adds the drawer front and back brackets
- { DRAWS } -- Hafele MX Galleries Adds the Rails and DesignSides etc
- { DRAWS } -- Hafele MX Rollout Adds the rollout metal front, and cross gallery
- { DRAWS } -- Hafele MX KITS Adds the drawer KITS for ordering.
- { DRAWS } -- Attribute Detailed Adds the "Draws Detailed?" attribute to the cabinet (V7-8 only)

## Drawer Boxes

The Following drawer box constructions are provided:

- Hafele MX Drawer Drawers boxes
- Hafele MX Inner Rollouts

## Library

- CVS Hafele.cvc Cabinet Vision Catalog of Hafele Library parts

## Room Notes

The Following system notes are provided:

- S\_Room\_MX\_Rail "MX Rail Option"

## Room Attributes

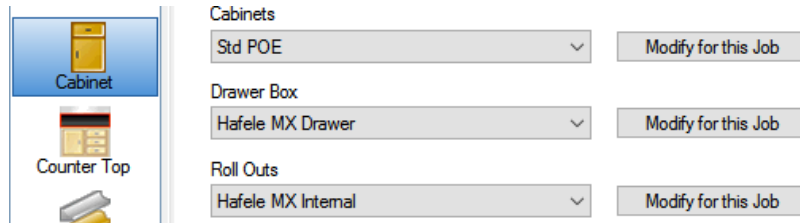
- S\_Room\_DFront\_Screwon "Draw Front Screwon"

## MX Usage

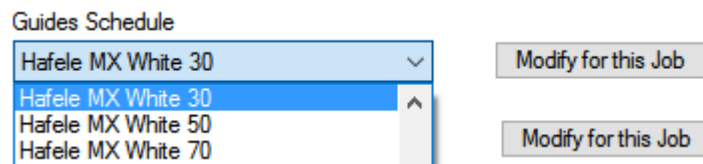
### Menu Selections for a Job or Room.

To use the MX drawers in a job you must make the following selections:

- In the job or room properties the Cabinet Construction tab should have the **Drawer Box** set to “Hafele MX Drawer” and the **Roll Outs** set to “Hafele MX Internal” :



- In the Hardware tab, choose one of the Hafele MX guide schedules:



- In the Materials tab, you can choose any of the Drawer Box or Roll Out schedules you have set up for other drawers as long as the materials selected are suitable for Hafele MX.

### Menu Selections for a Cabinet.

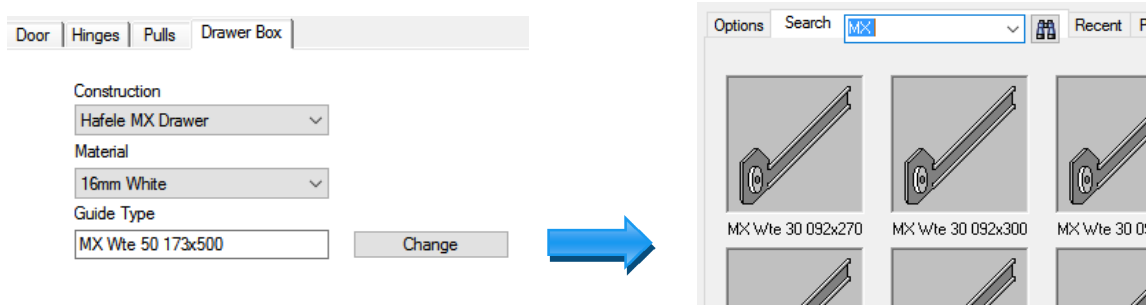
To use MX drawers in a cabinet when MX has **not** been selected in the room or job the Construction, Materials and Hardware tabs for the cabinet in question **must** be set to the same selections as above.

- To access those menus for one cabinet, take the cabinet into the cabinet editor, click on the section view, and select the Properties tab to find the menus.

### Menu Selections for one Drawer/Rollout.

To use MX drawers for one drawer/rollout when MX has **not** been selected in the cabinet, or you wish to use a MX drawer/rollout from a different drawer guide schedule.

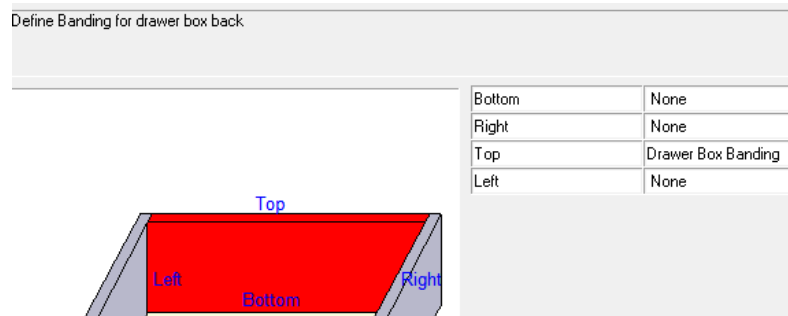
- Take the cabinet into the cabinet editor, click on the section view, and double click on the drawer/rollout to bring up its Properties menu, and then select the Drawer Box or Rollout Tray tab.
- The Construction tab should be set to “Hafele MX .....” if it is not already.
- To Change to a different guide type press the “change” button shown here:



- Use the “Search” tab and a keyword such as “MX ” or “MX Wte” to quickly find the guide you want rather than paging through materials.

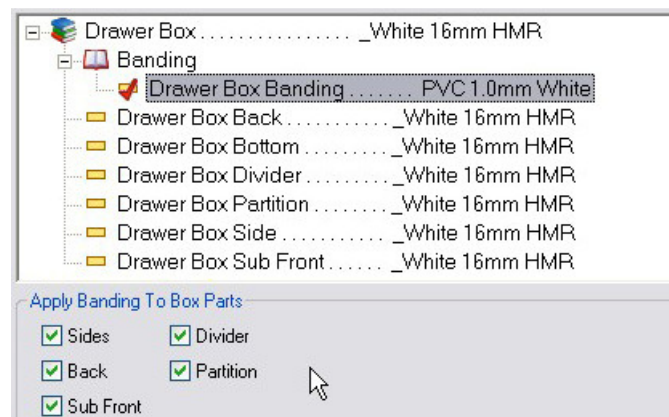
## Drawer Box Banding Setup (Version 9)

- For the drawer and roll out backs to be banded correctly please run the Construction wizards for the backs in the “Hafele MX Drawer” and “Hafele MX Inner” construction methods:



## Drawer Box Banding Setup (Version 7 and 8)

- For the drawer box backs and roll out sides to be banded correctly the selected material schedule for “Drawer Box” and “Roll Out” **must** have a suitable edge banding material selected and the “[Apply Banding To Box Parts](#)” **must** be ticked as shown here: (**Note** that the tick boxes **only** become active if the Drawer Box Banding material is selected first as shown)



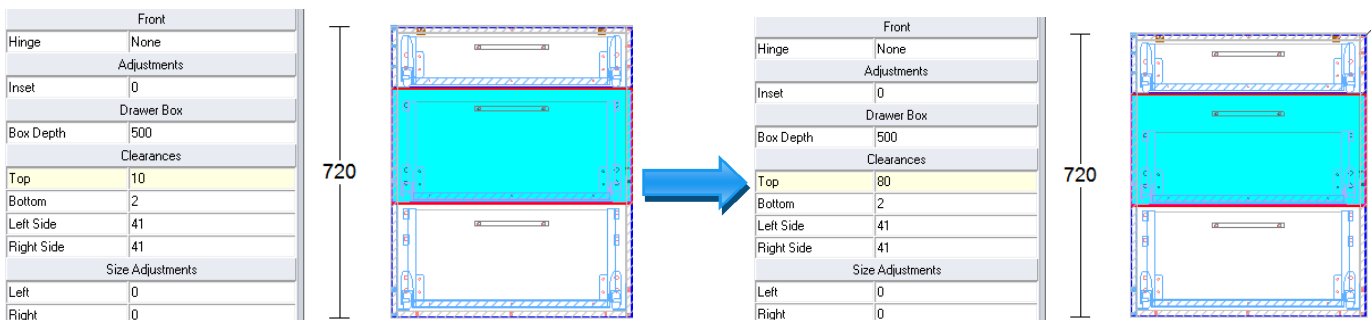
- The material schedules can be edited from the splash screen under the “Main” tab

## Drawer Boxes

### Drawer Box Height Control

When a drawer is first added to a cabinet, Cabinet Vision will always choose the tallest drawer that will fit from the drawer guide schedule, based on the available space.

- The space is determined by the distance between any cabinet or internal parts directly behind the drawer front, minus the drawer guide material top and bottom clearances.
- To select a smaller drawer height, click on the drawer front in the section view.
- Increase the “Top Clearance” in the sidebar until the drawer height you require appears, like this:

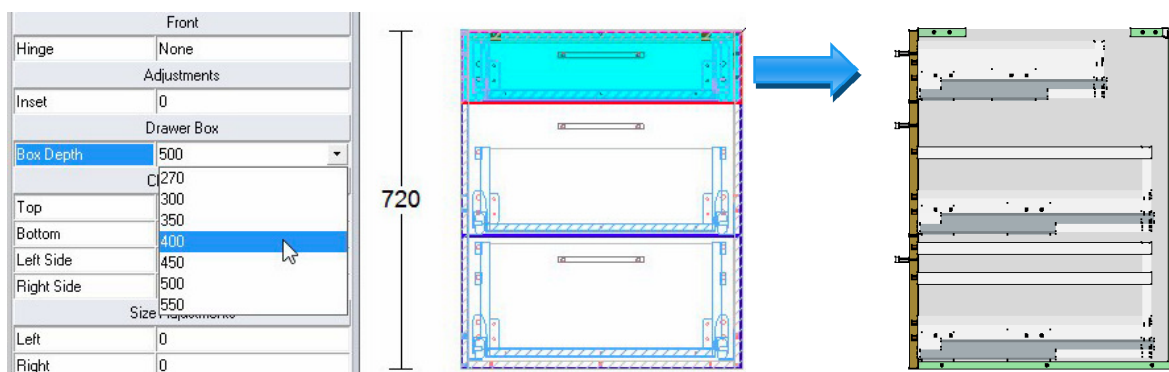


- **NOTE:** If you are using a drawer leveling UCS (which moves the top drawer boxes up to match the bottom lip reference of the bottom drawer), this may cause those drawer boxes to interfere with an object above them, whether it be the next drawer front, the cabinets top or top stretcher or a drawer stretcher or some other part which would normally not be in the way.
- This occurs because the leveling UCS is applied **after** the drawer height selection has been calculated.
- To prevent this always check every drawer in the cabinet editor, (preferably with the graphics turned on so you can clearly see any part interference), and reduce the drawer box height using the “Top Clearance” as described above.

### Drawer Box Depth Control

When a drawer is first added to a cabinet, Cabinet Vision will always choose the deepest drawer that will fit from the drawer guide schedule, based on the available space.

- To select a smaller drawer box depth, click on the drawer front in the section view.
- Choose the “Box Depth” from the dropdown list in the sidebar as shown here:



# Rollouts

## Rollout Height Control

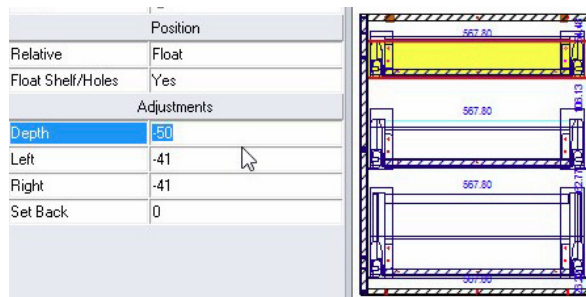
- To add a rollout in the section interior view of the cabinet editor, add a “Split Horz” and then select it and change it to a “Rollout Tray” in the left sidebar. Or use the “Split Multi Horz” function and choose the “Roll-out Tray” button and then press OK.
- When a rollout is first added to a cabinet, Cabinet Vision will choose the height based on the tallest rollout that will fit from the drawer guide schedule, based on the available space.
- To select a different rollout height, click on the rollout in the section interior view and use the sidebar.
- Choose the height from the dropdown box provided as shown here:



- NOTE:** The actual heights of the inner drawer are slightly more than the above measurements due to the taller front brackets etc. This may cause the inner drawers to interfere with each other or another cabinet part.
- To prevent this always check every rollout in the cabinet editor, (preferably with the graphics turned on so you can clearly see any part interference), and reduce the rollout box height using the method described above.
- The actual overall heights of the rollouts are as follows:
  - 123.1mm for the 94 High Rollout
  - 155.1mm for the 126 High Rollout
  - 203.4mm for the 186 High Rollout
  - 235.4mm for the 218 High Rollout

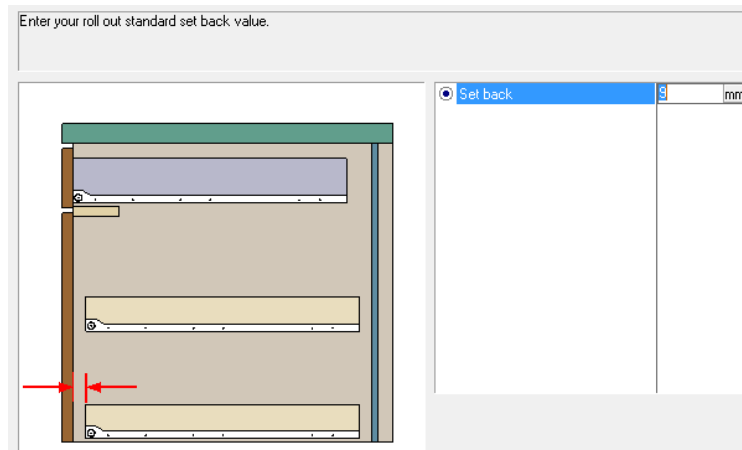
## Rollout Depth Control

- When a rollout is first added to a cabinet, Cabinet Vision will always choose the deepest rollout that will fit from the drawer guide schedule, based on the available space.
- To select a smaller rollout depth, click on the rollout in the section interior view.
- Increase the negative “Depth” adjustment in the sidebar until the size required is selected, as shown here:



## Rollout Setback (Version 9 Onwards)

- The Rollout setback is set in the Rollout Construction method by the “General” wizard.
- We have set this to 9mm, which is enough for the front brackets of the rollout drawer to clear the door.



- To adjust the setback of each rollout individually, use the “**Set Back**” setting under “**Adjustments**”, in the section view as shown in this image.

Adjustments	
Depth	-10
Left	-37.50
Right	-37.50
Set Back	0



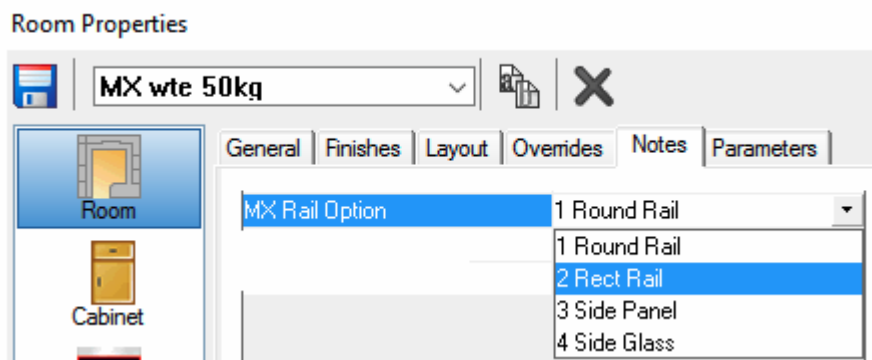
## Rollout Setback (Version 7 and 8)

- In Version 7 or 8, a UCS controls the setback of all the rollouts by 9mm compared to a drawer.
- To change the default value Refer to the “**UCS PUBLIC VARIABLES**” section below

## Round Rails, Rectangular Rails, Side Panels and Glass Sides

### Setting the Room Notes

For Pot Drawers there is a **Room note** which control the preferences for **Rails**, and **Side Panels**.



#### MX Rail Option

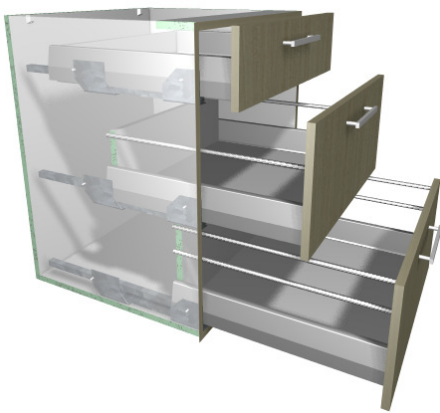
- 1 Round Rail**
- 2 Rect Rail**
- 3 Side Panel**
- 4 Side Glass**

Selects 1 Round Rail for all Pot Drawers or Rollouts  
 Selects 1 Rectangular Rail for Pot Drawers.  
 Selects a Side Panel (on a round rail) for Pot Drawers or Rollouts  
 Selects a Glass Side for Pot Drawers.

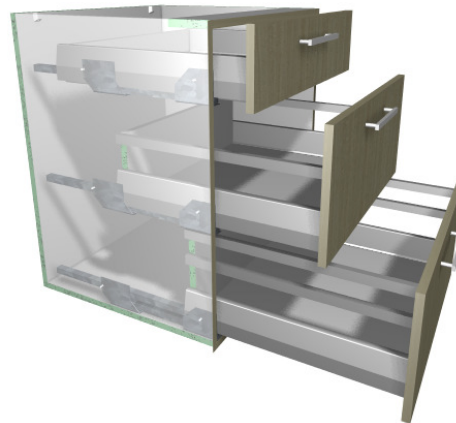
## Drawer Back Attributes

These Room preferences can then be overridden on any drawer, by changing the drawer back attributes:

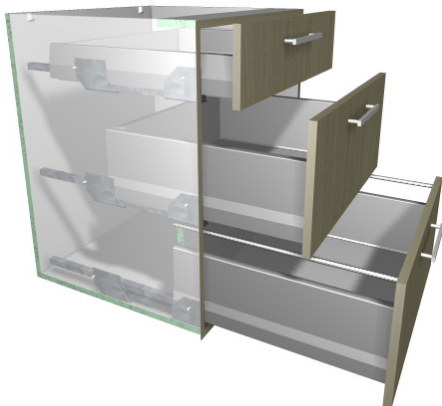
<b>MX Rail?</b>	<b>Auto</b>	<b>Uses the Room preference</b>
	<b>1 Round Rail</b>	Selects Round Rails
	<b>2 Rect Rail</b>	Selects Rectangular Rails (not available for Rollouts)
	<b>3 Side Panel</b>	Selects Side Panels (on a round rail)
	<b>4 Side Glass</b>	Selects Glass Sides (not available for Rollouts)
<b>MX Railx2?</b>	<b>True</b>	<b>Ads Extra Rail if there is enough space.</b>
<b>MX Rail Height?</b>	<b>173</b>	<b>Allows the back height to be altered.</b>
<b>MX Rail Gap?</b>	<b>64</b>	<b>Allows the Gap between Rails to be altered.</b>



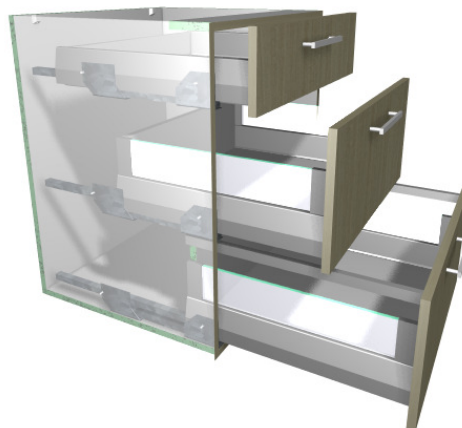
Round Rails



Rectangular Rails



Side Panels



Glass Sides

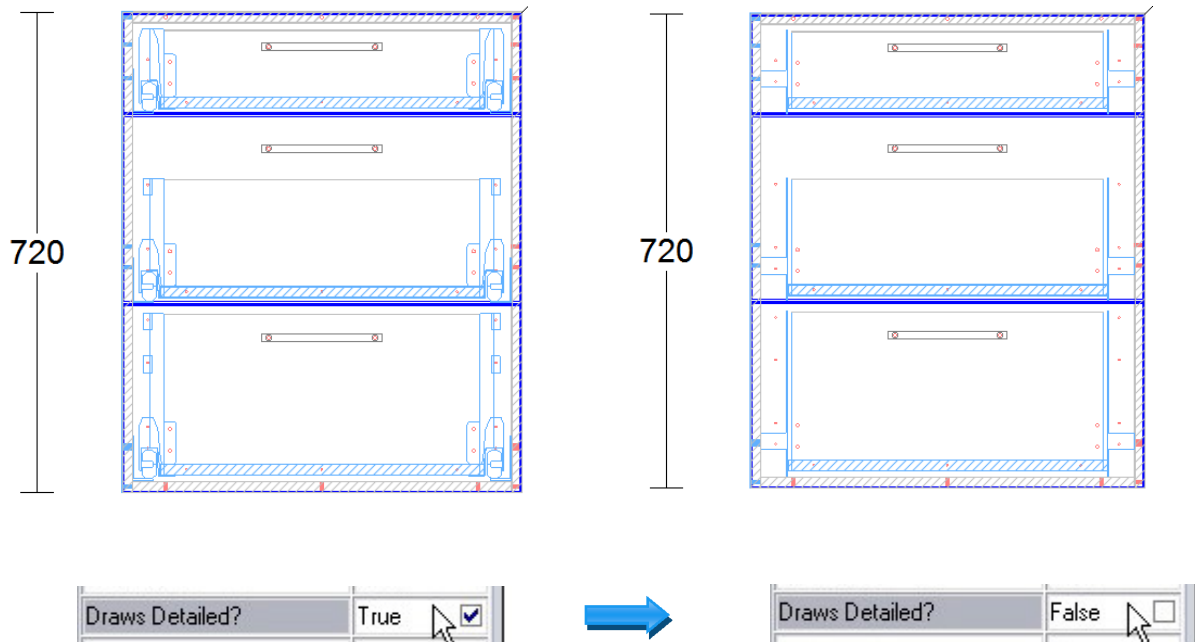


## Turning off the Graphics (not required in Version 9)

### Cabinet Attribute (Version 7 or 8 only)

On any cabinet containing a drawer or a rollout there will be an attribute called “Draws Detailed?” This attribute allows you to turn the 3D graphics on or off for the drawer box parts.

- This is because having the graphics turned on can cause too much lag on slower computers.
- Turning off the graphics does not alter the reports or CNC output.



## Drawer Fronts Screwon

### Room Attribute

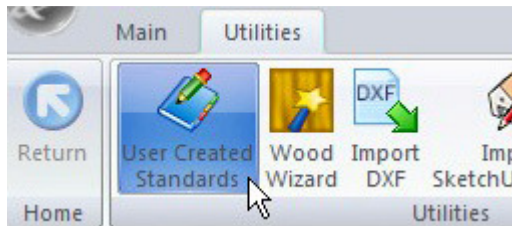
The “Draw Front Screwon” is a Room attribute which will change all the drawer front mounting holes to screw holes and change the front bracket material to the screw mount bracket for reports and ordering purposes.

## UCS Public Variables

### Location

There are Public Variables in the “{ DRAWS } -- Hafele MX Attributes” UCS.

- To change these variables go to the Utilities – Edit User Created Standards from the Room Plan or Elevation views



- Then click on the “{ DRAWS } -- Hafele MX Attributes” UCS.
- On the top right hand side of the screen you will see the Public Variables list:

Public Variables	
Front Knockin Depth	Imp(12)
Front Knockin DIA	Imp(10)
Front Screwon Depth	Imp(5)
Front Screwon DIAM	Imp(3)
Gallery Back Depth	Imp(5)
Gallery Back DIAM	Imp(3)
Guide Cabinet Depth	Imp(12)
Guide Cabinet DIA	Imp(5)
Initial Rollout Setback	imp(9)
Box Back Depth	Imp(12)
Box Back DIAM	Imp(5)

### Rollout Setback (V7 and 8 Only)

The “Initial Rollout Setback” Public Variable sets the initial rollout setback value to 9mm... In Version 9 this is done in the rollout construction instead.

### Drilling Diameters and Depths

The remaining 8 Public variables allow you to choose what diameters and depth you wish to drill for the various drawer box parts.

Each set of holes has a separate diameter and depth value.

- Front Knockin** = Holes in the Drawer Front for front connectors if Room Attribute “Draw Front Screwon” is **False**.
- Front Screwon** = Holes in the Drawer Front for front connectors if Room Attribute “Draw Front Screwon” is **True**.
- Gallery Back** = Holes in the Drawer box or Rollout back for the Gallery Rail brackets.
- Guide Cabinet** = Holes in the Cabinet for the Drawer or Rollout Guides.
- Box Back** = Holes in the Drawer box or Rollout back for the drawer back brackets.

- If your system is set to mm, Edit the values in the **Imp()** brackets to the diameter and depths you require.
- If your system is set to inches, simply replace the whole **imp()** with the imperial measurement instead.
- Eg: **Imp(3)** might become **1/8**

**Note: To turn off any of the holes if not required, set the depth to zero.**

Once you have changed all these values to your requirements, you can close the UCS editor.

## Vertical position of drawers

We have positioned the MX drawers 2mm above the drawer base or reveal center, as per Hafeles recommended position. We have achieved this by setting the “Minimum Bottom Clearance” in the drawer guide materials to 2mm. If you prefer more tolerance you can increase the value, on every drawer guide material.

## Tools Required

- The drill diameters you choose in the UCS User Definable Variables above are all required for this package to work. You must have these tool diameters in your tool catalog and in your machine.

## Package Exclusions

Some of the drilling shown in various images contained in this document are not included in the Hafele MX Visual Package, but come from other packages which are sold separately.

Any items shown in any images such as cabinet screw holes, benchtop brackets, plastic legs etc are also part of our other packages which are sold separately.

See our website for more detailed information on these packages.