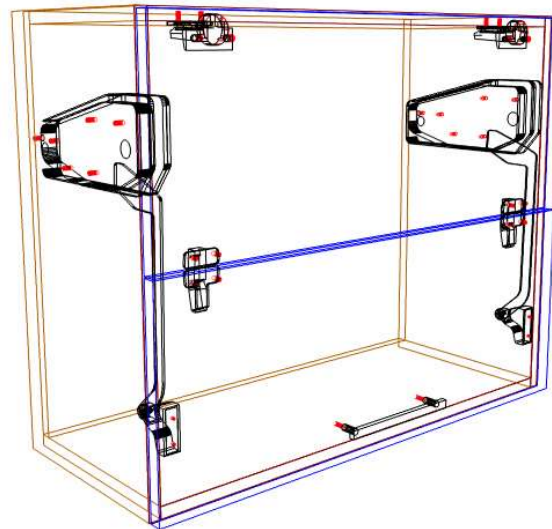


## Hafele Free Fold 'S' User Guide.



### Introduction

#### Overview

- The 'Hafele Free Fold S Package' from Solid Setup Plus adds the Hafele Free Fold S door lift system to Cabinet Vision.
- It provides drilling for the Cabinet and Door parts, for CNC output.  
(You can change the drilling diameters and depths to the tools you want to use.)
- It also adds 3d graphics for the mechanisms and brackets etc.
- Mech material descriptions contain the Hafele KIT order number after the # symbol.
- UCS calculates weight of Door by using the density of board and handle weight.
- User can adjust density, handle weight or Total weight using attributes.
- Arm length will automatically be selected from 11 sizes depending on cabinet height
- Order number will automatically be selected depending on total door weight.
- The Free Fold Connecting Hinges shown in images are provided with this package.
- **The Top door Hinges shown in images are NOT provided with this package (Use a suitable hinge)**

### Included in This Package

#### User Created Standards

The Following UCSs are provided

- { DOOR } -- Hafele Free Fold S Attributes -Adds Hafele Free Fold S Attributes to DOR
- { DOOR } -- Hafele Free Fold S -Adds Hafele Free Fold S to DOR\_OPEN

#### Library

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

## Parts

- HNGDXF Hinge type part used for Mechanisms
- HNGPLT Hinge type part used for Mech Covers
- HNGSTAY Hinge type part used for Arms
- BRKT Part used for EDrive bumpers

## Materials:

**Hinge Material:** "HAF Free Fold Hinge"

**Misc Materials:** Various materials required for ordering the correct kit, and for the visual components

## Free Fold S Usage

### Door Requirements.

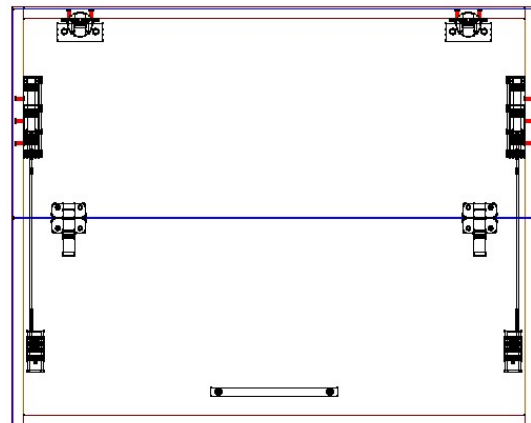
For the Free Fold S to appear on a door the following conditions must be met

- Cabinet **must** have 2 doors hinged at top one above the other
- Cabinet height **must** be in size range **450-1040 High** and doors must be **260-2400 Wide**
- Lower Door **must** be **equal** to the top door in height
- Cabinet internal depth must be minimum 270mm.
- The "**Free Fold S?**" Attribute will then appear on the Top Door to switch on Free Fold S.
- (You must be in the orthographic or "Smiley" views to click on the door and see the attributes)
- You **must** select the "**HAF Free Fold Hinge**" provided, for the bottom door.
- For **Version 9**, also choose the "**HAF Free Fold Plate**" for the bottom door. (Blank plate)
- Please read all HAFELE documentation as well.

### Attributes

- If the "**Free Fold S?**" attribute is changed to "**True**" the following attributes will appear on the Top Door, along with the Free Fold mechanisms and arms.
- **NOTE:** - If the Door is not within the above size ranges the Free Fold S parts will **not** be added to the Door.
- **NOTE:** - If the Door is too heavy for any Mechanism the material selected will be "N/A".

Free Fold S ?	True
Free Fold S Colour	White
Free Fold S Dor Kg/m3	600
Free Fold S Dor Pull gm	200
Free Fold S Dors Kg	5.13
Free Fold S Dors Total Kg	5.33
Free Fold S EDrive	False
Free Fold S Pos Lh	16.20
Free Fold S Pos Rh	16.20
Free Fold S Servo	False



- **Free Fold S Dor Kg/m3** This value is the density of the door measured in kilograms per cubic meter and is used to calculate the weight of the door – **change this to the density of the board you are using if known (if you are using MDF its density varies between 600 and 800 Kg/m3)**

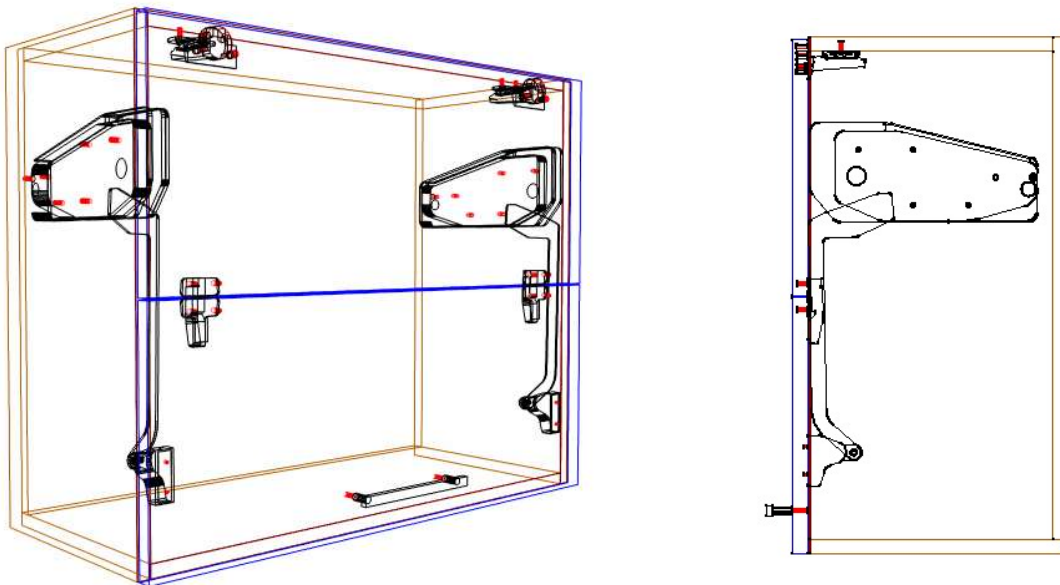
- **Free Fold S Dor Pull gm** -This value is the weight of the handle in grams and is used to calculate the total weight of the door plus handle – **(change this to the total weight of the handle(s) you are using.)**
- **Free Fold S Dors Kg** -This is the weight of the door as calculated by the **density** value **you** entered multiplied by the door size and thickness. – **(If you already know the door weight you can change this value rather than using the density calculated weight.)**
- **Free Fold S Dors Total Kg** -This is the total weight of the door and handle added together and is used to calculate the correct KIT to order **(If you already know the total door weight plus handle, you can change this value rather than using the density calculated weight.)**
- **Free Fold S Colour?** -Changes the Cover Colour **(White or Grey)**
- **Free Fold S Pos Lh** -Can be used to move the x position of the left arm.
- **Free Fold S Pos Rh** -Can be used to move the x position of the right arm.

**Note:** The correct arm length is calculated automatically based on the height of the doors.

- The correct vertical position of the mechanisms is calculated as per Hafele specifications automatically
- Due to the movement of the folding doors, they cannot be displayed in the correct opened position.

## EDrive Attributes (Coming Soon)

- **Free Fold S EDrive** -Turns on EDrive Drive and following attributes.
- **Free Fold S EDrive Bck Dia**-Changes EDrive Back Hole diameter – set to 0 to delete hole.
- **Free Fold S Switch Pos** -Can be used to move the EDrive switches up or down.



**Note:** The handle on the top door can be removed in the section view by changing the Pull Quantity to zero.

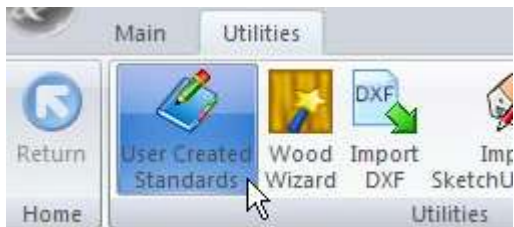
## Hinge Selection.

- If you have your own hinges in your database make sure you refer to the Hafele documentation to decide which hinges are suitable to use with Free Fold S. **All Top door Hinges shown in images are NOT provided with this package.**

## Setup

### UCS Public Variables

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



- Then click on the “{ DOOR } -- Hafele Free Fold S Attributes” UCS. The Public Variables are at the top right of the screen.

Public Variables	
Units?	Metric

- Units?** Please select the units you are using. This affects the KIT selected by the door weight.
- Now click on the “{ DOOR } -- Hafele Free Fold S” UCS. Here we set the various drilling sizes.

Public Variables	
Door Bracket Holes Depth	Imp(5)
Door Bracket Holes Diam	Imp(3)
Hinge Holes Depth	Imp(12.5)
Hinge Holes Diam	Imp(5)
Mech Holes Depth	Imp(12.5)
Mech Holes Diam	Imp(5)

- Edit the **Imp()** values to the diameter and depths you require.
- If you are using imperial sizes simply replace the whole **imp()** with the imperial measurement instead.
- E.g.: **Imp(3)** might become **1/8**
- For version 9 you can type 5mm instead of Imp(5) for metric values.

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

### Tools Required

- The drill diameters you choose in the UCS User Definable Variables above are 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 items shown in various images contained in this document are not included in the Hafele Free Fold S Package, but come from other packages which are sold separately.  
See our website for more detailed information on these packages.