Blum AVENTOS HL top User Guide.



Introduction

Overview

- The 'Blum AVENTOS HL TOP Package' from Solid Setup Plus adds the Blum AVENTOS HL top door Lift system to Cabinet Vision and optional Servo drive.
- 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.
- The Mechanisms and brackets etc are added as separate parts and materials for reporting purposes.
- All materials for ordering contain the Blum order number in the SKU and material description.
- UCS calculates weight of the Door by using the density of board and handle weight.
- You can adjust density, handle weight or Total weight using attributes.
- The Total weight determines which Lift Mechanism and Arm Assembly to use, automatically.
- Door can be displayed in an open position
- For Frameless or 32mm cabinets only – not suitable for Face Frame Cabinets

Included in This Package

User Created Standards

The Following UCSs are provided

- { DOOR } -- Blum AVENTOS HL top Attributes -Adds Blum AVENTOS HL top Attributes to DOR
- { DOOR } -- Blum AVENTOS HL top -Adds Blum AVENTOS HL top to DOR_OPEN

Parts

- ROD Assembly type part used for Connecting Rods

Miscellaneous Materials:

Name	Description
Aventos HL top Arm 3200	Aventos HL top Arm 3200 Model
Aventos HL top Arm 3500	Aventos HL top Arm 3500 Model
Aventos HL top Arm 3800	Aventos HL top Arm 3800 Model
Aventos HL top Arm 3900	Aventos HL top Arm 3900 Model
Aventos HL top Arm Set 3200	Aventos HL top Arm Set #22L3200
Aventos HL top Arm Set 3500	Aventos HL top Arm Set #22L3500
Aventos HL top Arm Set 3800	Aventos HL top Arm Set #22L3800
Aventos HL top Arm Set 3900	Aventos HL top Arm Set #22L3900
Aventos HL top Cross Stabiliser	Aventos HL top Cross Stabiliser Rod #22Q1076U
Aventos HL top CS Connector Set	Aventos HL top Cross Stab Connector set #22Q080Z
Aventos HL top CS Cover Cap	Aventos HL top Cross Stabiliser Cover Cap
Aventos HL top Mech Pre Mounted	Aventos HL Mech Model Pre Mounted
Aventos HL top Mech Screwon	Aventos HL Mech Model Screwon
Aventos HL top Mech Set 2200	Aventos HL Mech Screwon #22L2200
Aventos HL top Mech Set 2210	Aventos HL Mech Pre Mounted #22L2210
Aventos HL top Mech Set 2500	Aventos HL Mech Screwon #22L2500
Aventos HL top Mech Set 2510	Aventos HL Mech Pre Mounted #22L2510
Aventos Servo Drive Switch S.White	Aventos Servo Drive Switch.SW
Aventos Servo Drive Switch Lt Grey	Aventos Servo Drive Switch.HGR
Aventos Servo Drive Switch Dk Grey	Aventos Servo Drive Switch.TGR
Aventos Servo Drive Set 23.A000	Aventos Servo Drive Set #23.A000
Aventos Servo Bumper S.White	Aventos Servo Bumper Silk White
Aventos Servo Bumper Lt Grey	Aventos Servo Bumper Lt Grey
Aventos Servo Bumper Dk Grey	Aventos Servo Bumper Dk Grey
Aventos HF.HS.HL top Cover Set Servo S White	Aventos HF.HS.HL top Cover Set SERVO #23.8000.SW
Aventos HF.HS.HL top Cover Set Servo Lt Grey	Aventos HF.HS.HL top Cover Set SERVO #23.8000.HGR
Aventos HF.HS.HL top Cover Set Servo Dk Grey	Aventos HF.HS.HL top Cover Set SERVO #23.8000.TGR
Aventos HF.HS.HL top Cover Set S White	Aventos HF.HS.HL top Cover Set #22.8000.SW
Aventos HF.HS.HL top Cover Set Lt Grey	Aventos HF.HS.HL top Cover Set #22.8000.HGR
Aventos HF.HS.HL top Cover Set Dk Grey	Aventos HF.HS.HL top Cover Set #22.8000.TGR
Aventos HF.HS.HL top Cover Servo S White	Aventos HF.HS.HL top Cover SERVO Model S White
Aventos HF.HS.HL top Cover Servo Lt Grey	Aventos HF.HS.HL top Cover SERVO Model Lt Grey
Aventos HF.HS.HL top Cover Servo Dk Grey	Aventos HF.HS.HL top Cover SERVO Model Dk Grey
Aventos HF.HS.HL top Cover S White	Aventos HF.HS.HL top Cover Model S White
Aventos HF.HS.HL top Cover Lt Grey	Aventos HF.HS.HL top Cover Model Lt Grey
Aventos HF.HS.HL top Cover Dk Grey	Aventos HF.HS.HL top Cover Model Dk Grey
Aventos Front Brkt Screwon	Aventos Front Bracket Wood or Wide Alu #20S4200
Aventos Front Brkt Narrow Alu	Aventos Front Bracket Narrow Alu #20S4200A
Aventos Front Brkt EXPANDO T	Aventos Front Bracket Wood EXPANDO Thin #20S42T1
Aventos Front Brkt EXPANDO	Aventos Front Bracket Wood EXPANDO #20S42E1

AVENTOS HL top Usage

Door Requirements.

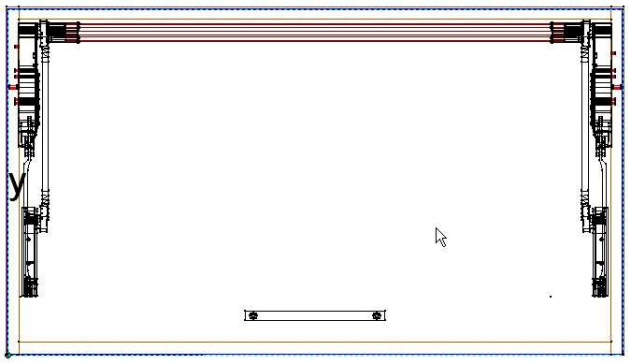
For the AVENTOS HL top to appear on a door the following conditions must be met

- Door must be hinged at top.
- Door must have its hinge quantity set to zero.
- Door height **must** be in size range **300-580 High** and door must be **260-1800 Wide**
- The **"AVENTOS HL top?"** Attribute will then appear on the Door to switch on AVENTOS HL top.
- (You must be in the orthographic or "Smiley" views to click on the door and see the attributes)

Attributes

- If the **"AVENTOS HL top?"** attribute is changed to "**Pre-Mounted**" or "**Screwon**" the following attributes will appear on the Door, along with the Aventos Mechanisms and Arms.
- **NOTE**: - **If the Door is not within the above size ranges or is too heavy for any Arms the AVENTOS HL top parts will not be added !**

Aventos HL TOP ?	Pre-Mounted
Aventos HL TOP Bracket	Wooden,Wide AL
Aventos HL TOP Colour	Light Grey
Aventos HL TOP Dor Kg/m3	800
Aventos HL TOP Dor Kg	4.97
Aventos HL TOP Dor Pull gm	200
Aventos HL TOP Dor Total Kg	5.17
Aventos HL TOP Open?	False
Aventos HL TOP Pos Lh	16
Aventos HL TOP Pos Rh	16
Aventos HL TOP Pos Top	16
Aventos HL TOP Servo	True
Aventos HL TOP Servo Bck Dia	10
Aventos HL TOP Servo Bump Bot	8
Aventos HL TOP Servo Bumpers	True
Aventos HL TOP Switch Pos	50



- **AVENTOS HL top Bracket?** -Changes the Front Brackets:
  1. Screwon = Screwon front brackets (5mm Dia x 3mm Deep)
  2. Expando = Expando front brackets (10mm Dia x 13mm Deep)
  3. Expando Thin = Expando front brackets for Thin Fronts (10mm Dia x 6mm Deep)
  4. Narrow ALU = Aluminium Narrow Frame Door (No Drilling)
- **AVENTOS HL top Colour?** -Changes the Cover Cap Colour **(Light Grey, Silk White, Dark Grey)**
- **AVENTOS HL top 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 680 and 830 Kg/m3)***
- **AVENTOS HL top Dor 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.)***
- **AVENTOS HL top 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.)***
- **AVENTOS HL top Dors Total Kg** -This is the total weight of the door and handle added together and is used to select the correct Lift Mechanism ***(If you already know the total door weight plus handle you can change this value rather than using the density calculated weight.)***
- **AVENTOS HL top Open?** -Show the door in the open position.
- **AVENTOS HL top Pos Lh** -Can be used to move the x position of the left Arm.
- **AVENTOS HL top Pos Rh** -Can be used to move the x position of the right Arm.
- **AVENTOS HL top Pos Top** - Can be used to move the whole unit up/down **if required**
- **AVENTOS HK top Pos In/Out** -Can be used to move the in/out position **only if required**.

Servo Attributes

- **AVENTOS HL top Servo** -Turns on Servo Drive and following 4 attributes.
- **AVENTOS HL top Servo Bck Dia** -Changes Servo Back Hole diameter – set to 0 to delete hole.
- **AVENTOS HL top Bumpers** -Turns off bumpers if not required.
- **AVENTOS HL top Bump Bot** -Can be used to move the bottom 2 bumpers up if base is scribed up etc.
- **AVENTOS HL top Switch Pos** -Can be used to move the servo switches up or down.

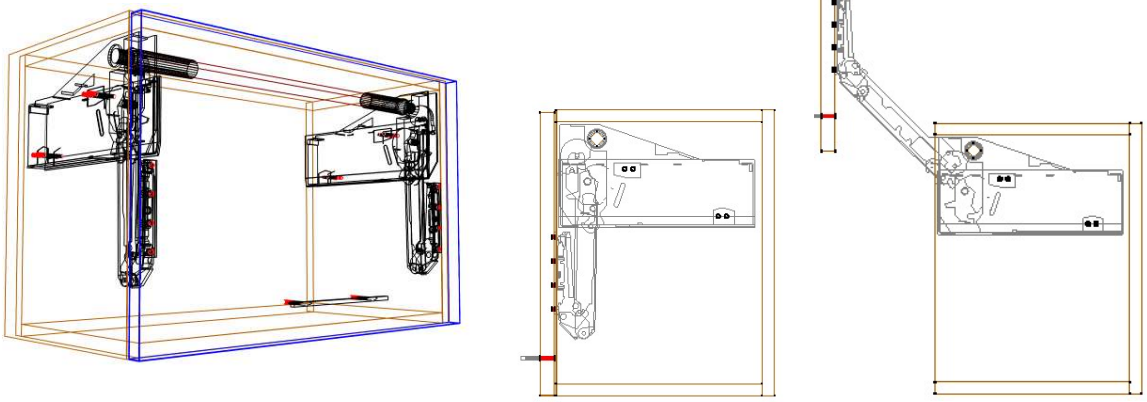
The following table shows which Lift Mechanism are used, for different door heights:

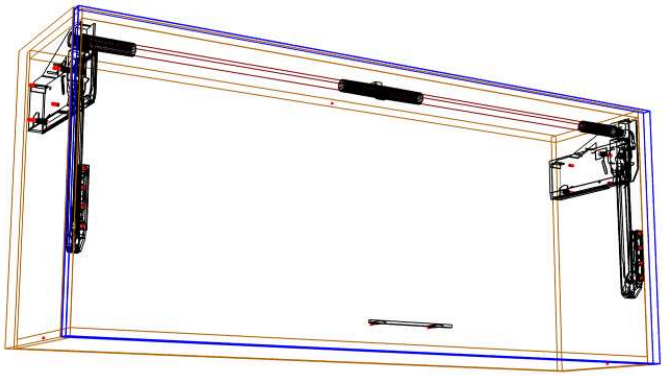
Door Height		Lift Mechanism	Lift Mechanism
Blum Values	Used Values	Pre-Mounted	Screwon
300 - 389	300 - 390	22L2210	22L2200
390 - 580	390 - 580	22L2510	22L2500

The following table shows which Arm Assembly are used, for different heights, and the weight limitations:

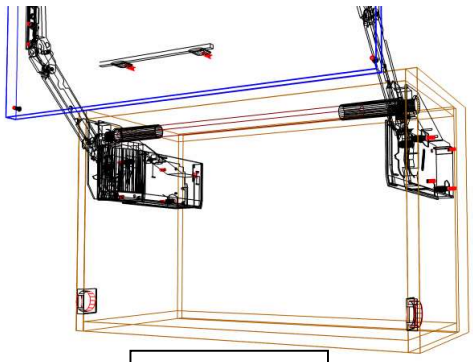
Door Height			
Blum Values	Used Values	Door weights inc. handle	Arm Assembly
300 - 339	300 - 340	1.50 - 9.00	22L3200
340 - 389	340 - 390	1.75 - 10.00	22L3500
390 - 540	390 - 480	2.00 - 12.25	22L3800
480 - 580	480 - 580	2.50 - 14.00	22L3900

Some Example Images:





Wide Cabinet with cross stabiliser connector



Servo Drive

Drilling Setup

UCS Public Variables

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

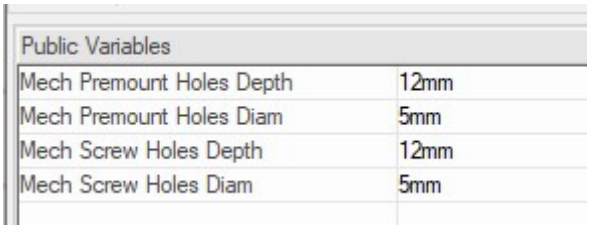


- Then click on the **"{DOOR} -- Blum AVENTOS HL top Attributes"**UCS. The Public Variables are at the top left of the screen.



- **Metric?** If you are using **imperial** units, the variable must be set to **zero** but if you are using **metric** units, it must be set to **1.**
- **Servo Switch Position** This sets the default servo switch position from the bottom of the door.

- Now click on the **"{DOOR} -- Blum AVENTOS HL top"**UCS. Here we set the various drilling sizes.



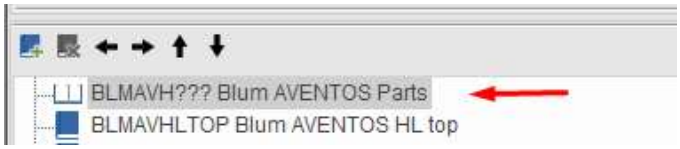
- Edit the values to the diameter and depths you require for the Pre-Mounted or Screwon Mech types.
- Please note the servo buffers drill at 5mm diameter and 11mm deep.

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

Front Bracket Drilling – Hole sizes

There are material parameters on the front bracket materials to set the drilling diameter and depths

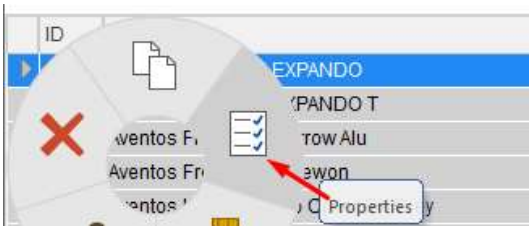
- In the Material Manager, find the **BLMAVH??? Blum AVENTOS Parts** folder:



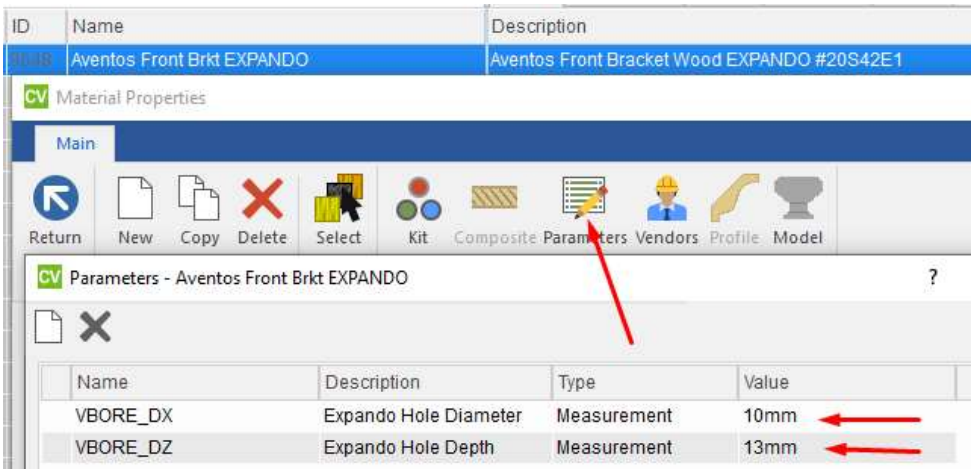
- This folder contains the following four Aventos Front Bracket materials:

Name	Description
Aventos Front Brkt EXPANDO	Aventos Front Bracket Wood EXPANDO #20S42E1
Aventos Front Brkt EXPANDO T	Aventos Front Bracket Wood EXPANDO Thin #20S42T1
Aventos Front Brkt Narrow Alu	Aventos Front Bracket Narrow Alu #20S4200A
Aventos Front Brkt Screwon	Aventos Front Bracket Wood or Wide Alu #20S4200

- For each material, right-click on it to select its properties.



- In the Properties click the Parameters Menu and change the parameters if required:



The hole sizes as provided are listed here:

- Aventos Front Brkt Screwon = Screwon front brackets (5mm Dia x 3mm Deep)
- Aventos Front Brkt EXPANDO = Expando front brackets (10mm Dia x 13mm Deep)
- Aventos Front Brkt EXPANDO T = Expando front brackets for Thin Fronts (10mm Dia x 6mm Deep)
- *Aventos Front Brkt Narrow Alu* = *Aluminium Narrow Frame Door (No Drilling)*

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

There may be some items shown in various images contained in this document which are not included in this Package. Any items such as cabinet screw holes, etc are part of our other packages which are sold separately.

See our website for more detailed information on these packages.