

Grass TEC

Face Frame Hinge System





A complete range of quality hinges for face frame cabinets.



864 Small Overlay



864 Large Overlay



862 Face Mount



861



861 MDF Hinge



ACC 140

Choosing a hinge system may be one of the last things on your checklist, but when the door is special, why should the hinge be any different? The TEC hinge system, designed for face frame cabinetry, offers a solution for every application in kitchen, bath, and residential cabinetry.

The TEC 860 family includes the TEC 864 one piece hinge with

cam adjustment, TEC 862 Face Mount hinge, TEC 861 one-piece hinge and the TEC 861 designed for MDF material. All are available in a variety of overlays and in an array of hinge and base plate versions. Constructed of all-steel and nickel-finish components for optimal strength and durability, the TEC hinge system works on a variety of doors with profiled door edges.

Engineered to exceed industry standards for opening and closing cycles and backed by the Grass Limited Lifetime warranty, it's what's inside that counts...why put anything but the best in your cabinets?

Introduction
Benefits & Installation
TEC 864 1/4" - 1"
TEC 864 1 1/4" - 1 1/2"
TEC 862 Face Mount
TEC 861
TEC 861 MDF
ACC 140
Installation Tools

Grass TEC

Technical Features

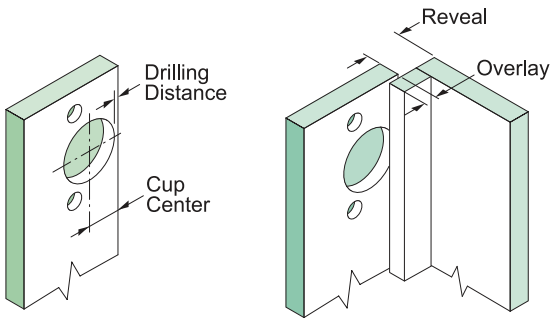
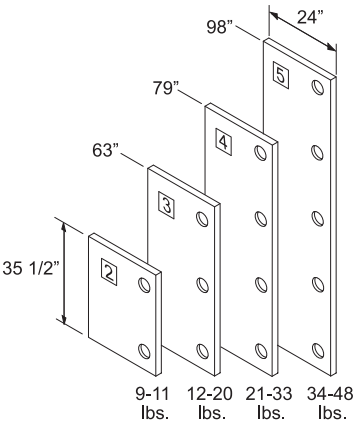
How to Specify TEC Hinges

There are numerous variables that will determine the choice of hinge. Determine the requirements of the application. Consider the following points based on the door to cabinet application.

- 1 Door overlay
- 2 Adjustment requirements:
 - a. Height only
 - b. Height and side
 - c. Height, side and depth
- 3 Base plate mounting to face frame:
 - a. Wrap-around - 3/4" thick frames only
 - b. Side mount - frames thicker than 3/4"
 - c. Face mount - any overlay greater than 1 3/8"
 - d. MDF material - mounting into end grain
- 4 Door removal:
 - a. With base plate mounting screw (one-piece hinges)
 - b. With depth adjustment screw (two-piece hinges)
- 5 Door clearance/hinge arm clearance (for interior rollout trays)
- 6 Door gap - distance between face frame and the back of the closed door
- 7 Minimum reveal - distance between two doors hinged back-to-back
- 8 Door thickness - thicker doors can restrict opening angle and minimum reveal
- 9 Hinge cup boring pattern for dowelled hinges
- 10 Door opening angle

Number of Hinges Per Door

The number of hinges required depends on the size and weight of the door. The distance between the hinges should be spaced as wide as possible. Use the diagram to determine the number of hinges needed. These recommendations are for doors without accessory attachments.



All-steel Construction

TEC hinges feature a solid metal hinge cup. All moving mechanism parts, including pivot pins, linkages and springs are hardened to ensure long-term durability.

Shallow Cup Depth

TEC hinges feature a shallow 10.5mm [3/32"] cup to accommodate profiled door edge. ACC 140 hinges have a 10mm [3/32"] cup depth.

BHMA Grade 2 Specifications

TEC hinges meet and surpass ANSI/BHMA Grade 2 specifications. All products are tested by an independent testing lab.






Grass Warranty

Limited Lifetime Warranty against defects in material and workmanship for as long as the original consumer owns the product.

Hinge Adjustment Chart

Hinge	Height	Side	Depth
864 Small Overlay	●	●	●
864 Large Overlay	●	●	●
862 Face Mount	●	●	
861	●	○	
861 Square Hole	●	○	●
861 MDF	●	○	
ACC 140	●	●	

○ Decrease overlay with optional spacer.

Description		Page	
TEC 864	108° Opening Angle - ¼" to 1" Overlay One-piece construction	6-7	
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Installation Tools	Insertion machines and accessories	18-19	

Grass TEC 864

108° Opening Angle - ¼" to 1" Overlay



Face Frame Hinges with 3-dimensional Adjustment

- One piece hinge and base plate combination
- For door thickness of up to ¾"
- Front locating tabs position hinge on face frame
- Micro side adjustment
- Cam depth adjustment
- Height adjustment at mounting screw

VS = Screw-on cup, 42mm pattern
VS8 = Dowelled cup, 42mm pattern
VS8-45 = Dowelled cup, 45mm pattern

Side-mount - 42mm drilling pattern

Overlay mm [inch]	Door Clearance mm [inch]	Arm Clearance mm [inch]	Dowelled Hinge Cup			Screw-on Hinge Cup		
			Reference #	Item #	Box Qty.	Reference #	Item #	Box Qty.
6 [¼"]	11 [⅞"]	14.5 [⅞"]	864VS8 (08-01)	03044-15	300	864VS (08-01)	03046-15	300
12.5 [½"]	3.5 [⅙"]	11 [⅞"]	864VS8 (82-01)	03024-15	300	864VS (82-01)	03026-15	300
19 [¾"]	0	11 [⅞"]	864VS8 (83-01)	02960-15	300	864VS (83-01)	02962-15	300
25 [1"]	0	11 [⅞"]	864VS8 (37-01)	02944-15	300	864VS (37-01)	02946-15	300

Wrap-around - 42mm drilling pattern

Overlay mm [inch]	Door Clearance mm [inch]	Arm Clearance mm [inch]	Dowelled Hinge Cup			Screw-on Hinge Cup		
			Reference #	Item #	Box Qty.	Reference #	Item #	Box Qty.
6 [¼"]	11 [⅞"]	14.5 [⅞"]	864VS8 (08-02)	02928-15	300	864VS (08-02)	02930-15	300
12.5 [½"]	3.5 [⅙"]	11 [⅞"]	864VS8 (82-02)	02924-15	300	864VS (82-02)	02926-15	300
19 [¾"]	0	11 [⅞"]	864VS8 (83-02)	02956-15	300	864VS (83-02)	02958-15	300
25 [1"]	0	11 [⅞"]	864VS8 (37-02)	02920-15	300	-	-	-

Side-mount - 45mm drilling pattern

Overlay mm [inch]	Door Clearance mm [inch]	Arm Clearance mm [inch]	Dowelled Hinge Cup		
			Reference #	Item #	Box Qty.
6 [¼"]	11 [⅞"]	14.5 [⅞"]	864VS8-45 (08-01)	03045-15	300
12.5 [½"]	3.5 [⅙"]	11 [⅞"]	864VS8-45 (82-01)	03025-15	300
25 [1"]	0	11 [⅞"]	864VS8-45 (37-01)	02945-15	300

Wrap-around - 45mm drilling pattern

Overlay mm [inch]	Door Clearance mm [inch]	Arm Clearance mm [inch]	Dowelled Hinge Cup		
			Reference #	Item #	Box Qty.
11 [⅞"]	5 [⅜"]	11 [⅞"]	864VS8-45 (77-02)	02992-15	300
12.5 [½"]	3.5 [⅙"]	11 [⅞"]	864VS8-45 (82-02)	02925-15	300
19 [¾"]	0	11 [⅞"]	864VS8-45 (83-02)	02957-15	300
25 [1"]	0	11 [⅞"]	864VS8-45 (37-02)	02921-15	300



IMPORTANT

To determine the correct application, Grass strongly recommends a trial mounting for all hinges and base plates.

Dimensions - Door Closed	Minimum Reveal	Door Open - Clearances

TEC 864 Minimum Reveal

Door Thickness 16 [5/8"] 17.5 [1 1/16"] 19 [3/4"]

Minimum Reveal 4.2 [5/32"] 5.4 [7/32"] 6.7 [1/4"]

Based on door with square edge.

Arm and Door clearances see Page 6.

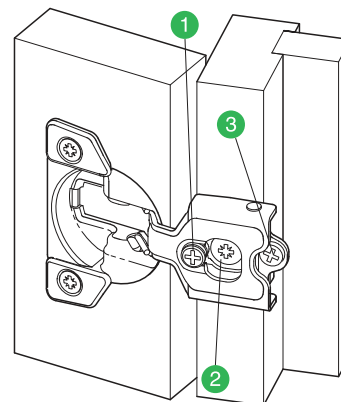
Adjustment Details

- 1** Side Adjustment+/-1.5mm [1/16"]
Rotate micro screw.
- 2** Height Adjustment.....+/-2mm [3/32"]
Loosen screw, align door, tighten screw.
- 3** Depth Adjustment.....out 2.5mm [3/32"], in .5mm [1/32"]
Rotate cam screw.

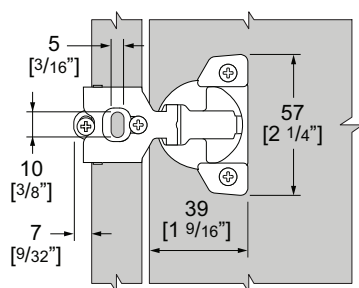
Mounting Screws

Hinge cup to door, #6 x 5/8" Flat head screw

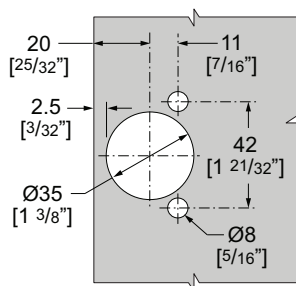
Base plate to face frame, #8 x 3/4" Pan head screw



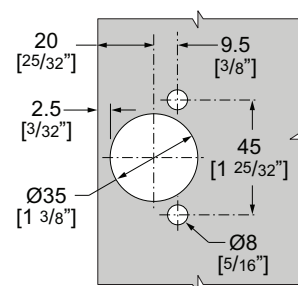
Overall Dimensions



42mm drilling pattern



45mm drilling pattern



Grass TEC 864

108° Opening Angle - 1¼" to 1½" Overlay



Face Frame Hinges with 3-dimensional Adjustment

- One-piece hinge and base plate combination
- For door thickness of up to ¾"
- Front locating tabs position hinge on face frame
- Cam side adjustment
- Cam depth adjustment
- Height adjustment at mounting screw

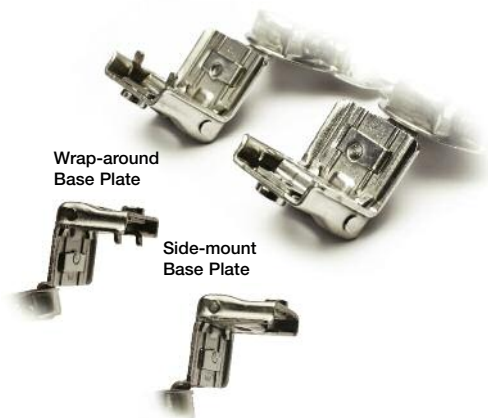
VS = Screw-on cup, 42mm pattern
VS8 = Dowelled cup, 42mm pattern
VS8-45 = Dowelled cup, 45mm pattern

Side-mount - 42mm drilling pattern								
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup			Screw-on Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.	Reference #	Item #	Box Qty.
32 [1 ¼"]	0	10 [13/32"]	864VS8 (31-01)	03048-15	300	864VS (31-01)	03050-15	300
35 [1 ⅜"]	0	10 [13/32"]	864VS8 (16-01)	03086-15	300	864VS (16-01)	03088-15	300
38 [1 ½"]	0	10 [13/32"]	864VS8 (33-01)	03098-15	300	864VS (33-01)	03100-15	300

Wrap-around - 42mm drilling pattern								
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup			Screw-on Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.	Reference #	Item #	Box Qty.
32 [1 ¼"]	0	10 [13/32"]	864VS8 (31-02)	02932-15	300	864VS (31-02)	02934-15	300
35 [1 ⅜"]	0	10 [13/32"]	864VS8 (16-02)	02936-15	300	864VS (16-02)	02938-15	300
38 [1 ½"]	0	10 [13/32"]	864VS8 (33-02)	02940-15	300	864VS (33-02)	02942-15	300

Side-mount - 45mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
32 [1 ¼"]	0	10 [13/32"]	864VS8-45 (31-01)	03049-15	300
35 [1 ⅜"]	0	10 [13/32"]	864VS8-45 (16-01)	03087-15	300
38 [1 ½"]	0	10 [13/32"]	864VS8-45 (33-01)	03099-15	300

Wrap-around - 45mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
32 [1 ¼"]	0	10 [13/32"]	864VS8-45 (31-02)	02933-15	300
35 [1 ⅜"]	0	10 [13/32"]	864VS8-45 (16-02)	02937-15	300
38 [1 ½"]	0	10 [13/32"]	864VS8-45 (33-02)	02941-15	300



IMPORTANT

To determine the correct application, Grass strongly recommends a trial mounting for all hinges and base plates.

Dimensions - Door Closed	Minimum Reveal	Door Open - Clearances

TEC 864 Minimum Reveal

Door Thickness 16 [$\frac{5}{8}$] 17.5 [$1\frac{1}{16}$] 19 [$\frac{3}{4}$]

Minimum Reveal 4.2 [$\frac{5}{32}$] 5.4 [$\frac{7}{32}$] 6.7 [$\frac{1}{4}$]

Based on door with square edge.

Arm and Door clearances see Page 8.

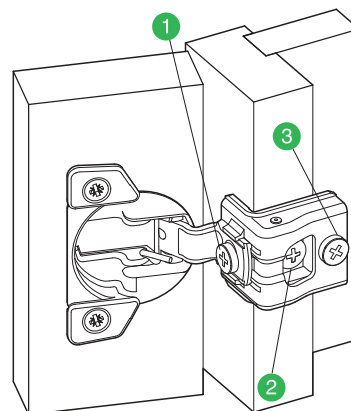
Adjustment Details

- 1** Side Adjustment+/-1.5mm [$\frac{1}{16}$ "]
Rotate cam screw.
- 2** Height Adjustment.....+/-2mm [$\frac{3}{32}$ "]
Loosen screw, align door, tighten screw.
- 3** Depth Adjustment.....out 2.5mm [$\frac{3}{32}$ "], in .5mm [$\frac{1}{32}$ "]
Rotate cam screw.

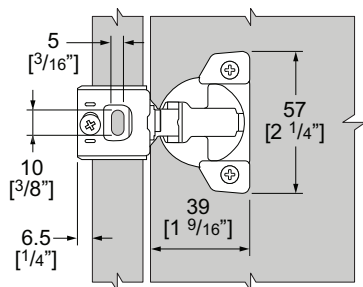
Mounting Screws

Hinge cup to door, #6 x $\frac{5}{8}$ " Flat head screw

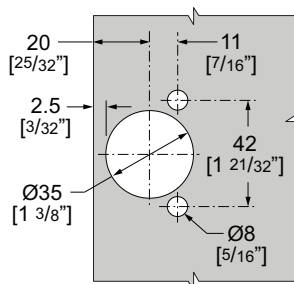
Base plate to face frame, #8 x $\frac{3}{4}$ " Pan head screw



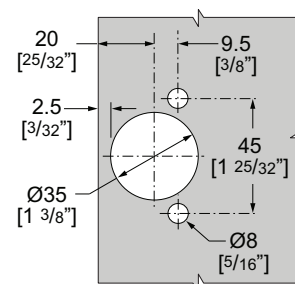
Overall Dimensions



42mm drilling pattern



45mm drilling pattern



Grass TEC 862

108° Opening Angle - Face Mount



Assembled Hinge

Face Mount Face Frame Hinges

- Two-piece hinge and face mount plate combination
- Side and height adjustment
- Position face mount plate to achieve overlay
- For overlays 1 3/8" and greater



Loose Hinge



Loose Base Plate

VS = Screw-on cup, 42mm pattern
VS8 = Dowelled cup, 42mm pattern
VS8-45 = Dowelled cup, 45mm pattern

Assembled Hinges - 42mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
35 [1 3/8"] Min	0	0	862VS8 NI (19)	02814-15	300

Assembled Hinges - 45mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
35 [1 3/8"] Min	0	0	862VS8-45NI (19)	02829-15	300

Loose Hinges - 42mm pattern					
Dowelled Hinge Cup			Screw-on Hinge Cup		
Reference #	Item #	Box Qty.	Reference #	Item #	Box Qty.
862VS8	02801-19	600	862VS	02800-19	600

Loose Hinges - 45mm pattern		
Dowelled Hinge Cup		
Reference #	Item #	Box Qty.
862VS8-45	00113-19	600

Loose Base Plates - Face Mount			
Overlay	Base Plate		
mm [inch]	Reference #	Item #	Box Qty.
35 [1 3/8"] Min	862-19	29155-19	600

IMPORTANT

To determine the correct application, Grass strongly recommends a trial mounting for all hinges and base plates.

Dimensions - Door Closed	Minimum Reveal	Door Open - Clearances
<p>4.9 [3/16"] Door Thickness 10.5 [7/16"] 2.5 [3/32"] 20 [13/16"] Overlay 35 [1 3/8"] Min.</p>	<p>#6 x 5/8" flat head screw 9.5 [3/8"] Min. Reveal</p>	<p>108°</p>

TEC 862 Minimum Reveal

Door Thickness 16 [5/8"] 17.5 [1 1/16"] 19 [3/4"]

Minimum Reveal 4.2 [5/32"] 5.4 [7/32"] 6.7 [1/4"]

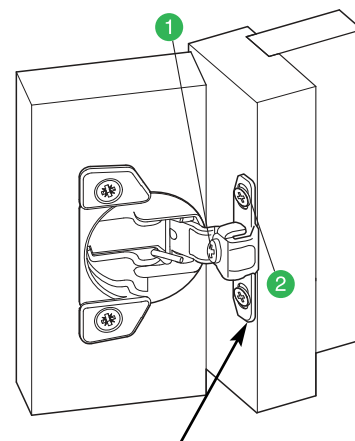
Based on door with square edge.

Adjustment Details

- 1 Side Adjustment1.5mm [1/16"]
Loosen screw, position door, tighten screw.
- 2 Height Adjustment.....+/-2mm [3/32"]
Loosen screws, align door, tighten screws.

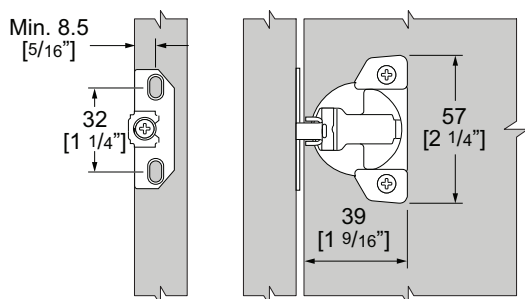
Mounting Screws

Hinge cup to door, #6 x 5/8" Flat head screw
Base plate to face frame, #6 x 5/8" Flat head screw

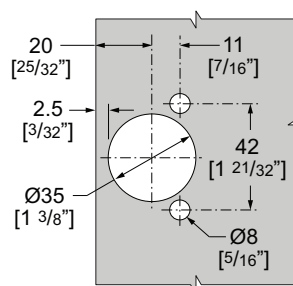


Door Overlay = 35 [1 3/8"] when base plate is flush with inside edge of face frame.

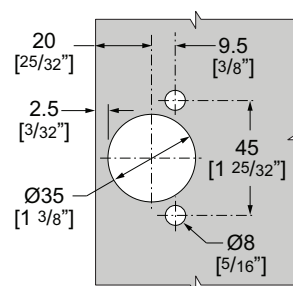
Overall Dimensions



42mm drilling pattern



45mm drilling pattern



Grass TEC 861

108° Opening Angle



861

861 Square Hole

1-piece Face Frame Hinges

- Front locating tabs for easy indexing on frames
- Shallow 10.5mm cup for variety of door profiles
- Works on door thicknesses from 13mm (1/2") to 19mm (3/4")
- Depth adjustment available on square hole design

VS = Screw-on cup, 42mm pattern
VS8 = Dowelled cup, 42mm pattern
VS8-45 = Dowelled cup, 45mm pattern

Side-mount - 42mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
8 [5/16"]	8.5 [11/32"]	12.5 [1/2"]	861VS8 (65)	02876-16	400
9.5 [3/8"]	7 [9/32"]	11 [7/16"]	861VS8 (67)	02880-16	400
11 [7/16"]	5 [7/32"]	9.5 [3/8"]	861VS8 (35)	02859-16	400
14 [9/16"]	2.5 [3/32"]	7 [9/32"]	861VS8 (54)	02860-16	400

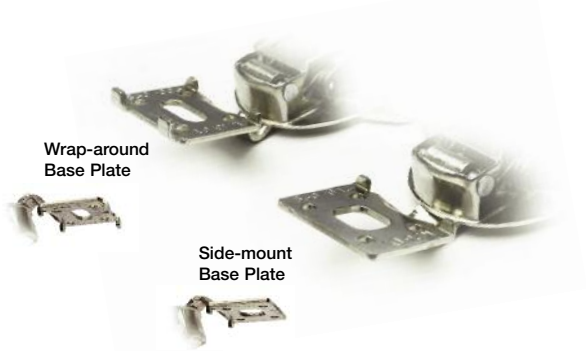
Wrap-around - 42mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
6 [1/4"]	10 [13/32"]	14 [9/16"]	861VS8 (08)	02794-16	400
12.5 [1/2"]	3 [1/8"]	7 [9/32"]	861VS8 (05)	30725-16	400
14 [9/16"]	2.5 [3/32"]	7 [9/32"]	861VS8 (10)	29138-16	400

Side-mount - 45mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
16 [5/8"]	1 [1/32"]	5 [3/16"]	861VS8-45 (07)	30727-16	400

Wrap-around - 45mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
6 [1/4"]	10 [13/32"]	14 [9/16"]	861VS8-45 (08)	02796-16	400
12.5 [1/2"]	3 [1/8"]	7 [9/32"]	861VS8-45 (05)	00108-16	400

Square Hole, Side-mount - 45mm drilling pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
12.5 [1/2"]	3 [1/8"]	7 [9/32"]	861VS8-45 (46)	02856-16	400

Side Adjustment Spacer		
Reference #	Item #	Box Qty.
1.5mm [1/16"] Slotted Spacer	00047-42	100



IMPORTANT
To determine the correct application, Grass strongly recommends a trial mounting for all hinges and baseplates.

Dimensions in millimeters, fractional inch equivalents as noted.

Dimensions - Door Closed	Minimum Reveal	Door Open - Clearances
<p>Overlay</p> <p>4.9 [3/16"]</p> <p>2.5 [3/32"]</p> <p>Door Thickness</p> <p>10.5 [7/16"]</p> <p>20 [25/32"]</p>	<p>#8 x 3/4" pan head screw</p> <p>9.5 [3/8"]</p> <p>Min. Reveal</p>	<p>Arm Clearance</p> <p>Door Clearance</p> <p>108°</p>

TEC 861 Minimum Reveal

Door Thickness 16 [5/8"] 17.5 [1 1/16"] 19 [3/4"]

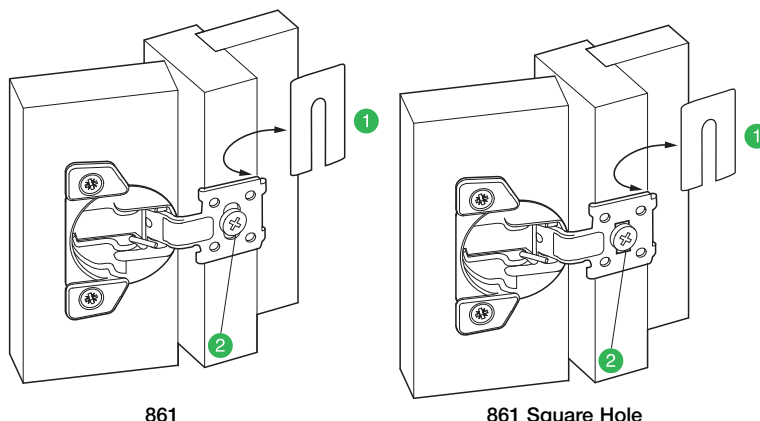
Minimum Reveal 4.2 [5/32"] 5.4 [7/32"] 6.7 [1/4"]

Based on door with square edge.

Arm and Door clearances see Page 12.

Adjustment Details

- 1 Side AdjustmentDecreasing overlay achieved with use of 1.5 mm [1/16"] spacer.
- 2 Height Adjustment.....+/-2mm [3/32"]
Loosen screw, align door, tighten screw.



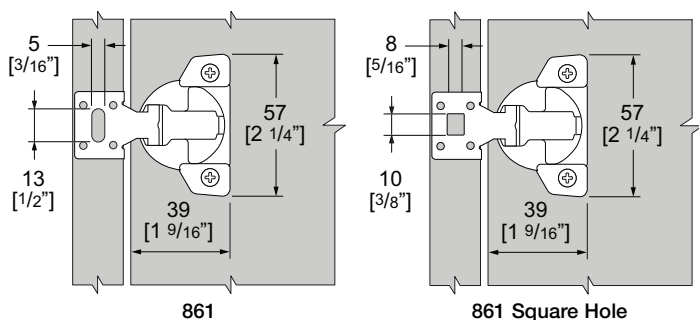
Mounting Screws

Hinge cup to door, #6 x 5/8" Flat head screw

Base plate to face frame, 861, #8 x 3/4" Pan head screw

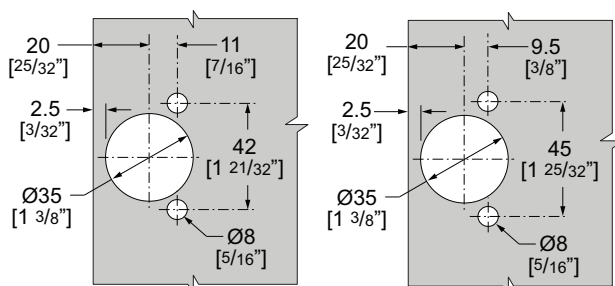
Base plate to face frame, 861 Square Hole, #8 x 3/4" Washer head screw

Overall Dimensions



42mm drilling pattern

45mm drilling pattern



Grass TEC 861 for MDF Frame Material

108° Opening Angle



Face Frame Hinges for MDF - A unique hinge for cabinets using one piece MDF face frames

- Patented wrap-around base plate prevents splitting of frame material
- All metal construction with heat tempered band arm
- Available for ½", ⅝", and ¾" frame thicknesses
- ½" overlay

VS8 = Dowelled cup, 42mm pattern

Wrap-around - 42 mm drilling pattern						
Frame Thickness	Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup		
mm [inch]	mm [inch]	mm [inch]	mm [inch]	Reference #	Item #	Box Qty.
12.5 [½"]	12.5 [½"]	3 [⅛"]	7.5 [⅜"]	861VS8 (85)	30396-14	250
16 [⅝"]	12.5 [½"]	3 [⅛"]	7.5 [⅜"]	861VS8 (93)	30397-14	250
19 [¾"]	12.5 [½"]	3 [⅛"]	7.5 [⅜"]	861VS8 (94)	30398-14	250

Spacer			
Description	Reference #	Item #	Box Qty.
Spacer	1.5 [⅛"] slotted for MDF 861, clear	00209-42	100
Screw	#8 x 3/4" Round head, self drilling, Zinc	81018-43	500



IMPORTANT
To determine the correct application, Grass strongly recommends a trial mounting for all hinges and base plates.

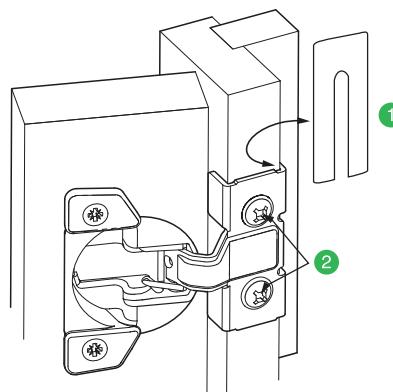
Dimensions - Door Closed	Minimum Reveal	Door Open - Clearances								
<p>Overlay</p> <p>4.9 [3/16"]</p> <p>2.5 [3/32"]</p> <p>Door Thickness 10.5 [7/16"]</p> <p>20 [25/32"]</p>	<p>#8 x 3/4" pan head screw</p> <p>9.5 [3/8"]</p> <p>Min. Reveal</p>	<p>Arm Clearance</p> <p>Door Clearance</p> <p>108°</p>								
<p>TEC 861 Minimum Reveal</p> <table><tr><td>Door Thickness</td><td>16 [5/8"]</td><td>17.5 [1 1/16"]</td><td>19 [3/4"]</td></tr><tr><td>Minimum Reveal</td><td>4.2 [5/32"]</td><td>5.4 [7/32"]</td><td>6.7 [1/4"]</td></tr></table> <p>Based on door with square edge.</p>			Door Thickness	16 [5/8"]	17.5 [1 1/16"]	19 [3/4"]	Minimum Reveal	4.2 [5/32"]	5.4 [7/32"]	6.7 [1/4"]
Door Thickness	16 [5/8"]	17.5 [1 1/16"]	19 [3/4"]							
Minimum Reveal	4.2 [5/32"]	5.4 [7/32"]	6.7 [1/4"]							
<p>Arm and Door clearances see Page 14.</p>										

Adjustment Details

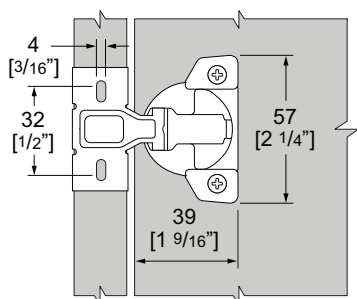
- 1 Side AdjustmentDecreasing overlay achieved with use of 1.5mm [1/16"] spacer.
- 2 Height Adjustment.....+/-2mm [3/32"]
Loosen screws, align door, tighten screws.

Mounting Screws

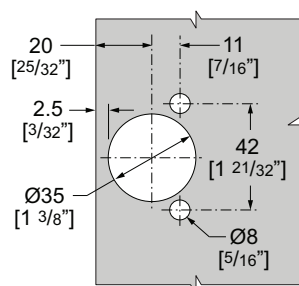
Hinge cup to door, #6 x 5/8" Flat head screw
Base plate to face frame, #8 x 3/4" Pan head screw



Overall Dimensions



42mm drilling pattern



Grass ACC 140

130° Opening Angle



Face Frame Hinges with Minimal Gap

- One-piece hinge
- Zinc die-cast, nickel plated
- True European hinge function - small gaps
- Minimal gap between the door and frame
- Suitable for overlays from 26-29mm [1 1/32" - 1 1/8"]
- Shallow cup depth of 10mm [13/32"]

Wrap-around - 48mm drilling pattern				
Overlay	Door Clearance	Arm Clearance	Screw-on Hinge Cup	
mm [inch]	mm [inch]	mm [inch]	Item #	Box Qty.
26-29 [1 1/32"-1 1/8"]	2 [1/16"]	26 [1 1/32"]	276.743.59.9215	125

IMPORTANT
To determine the correct application, Grass strongly recommends a trial mounting for all hinges and base plates.

Dimensions - Door Closed	Minimum Reveal	Door Open - Clearances

ACC 140 Minimum Reveal

Door Thickness 16 [5/8"] 17.5 [1 1/16"] 18 [1 1/16"] 19 [3/4"]

Minimum Reveal 0.3 [1/32"] 1.2 [3/64"] 1.8 [1/16"] 4 [5/32"]

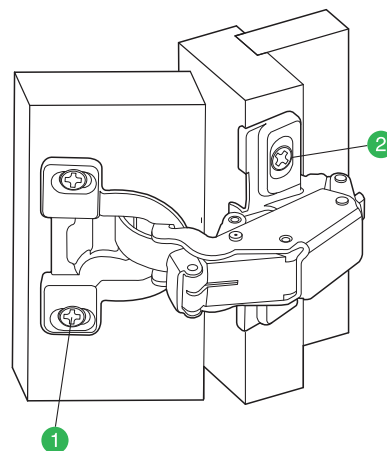
Based on door with square edge.

Adjustment Details

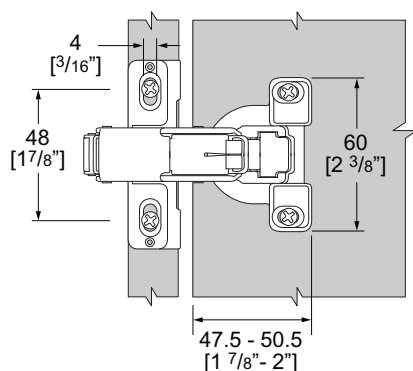
- 1 Side Adjustment+/-1.5mm [1/16"]
Loosen screws, align door, tighten screws.
- 2 Height Adjustment.....+/-3mm [1/8"]
Loosen screws, align door, tighten screws.

Mounting Screws

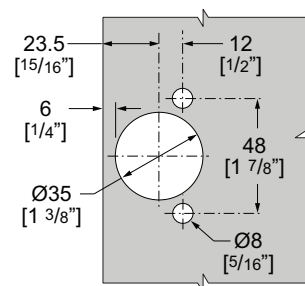
Hinge cup to door, #6 x 5/8" Flat head screw
Base plate to face frame, #8 x 3/4" Flat head screw



Overall Dimensions



48mm drilling pattern



Subject to technical modifications without notice.

Grass America™

Ecopress drilling machine

Drilling and insertion machine for Grass hinges.

- Manual or pneumatic drilling/pressing options
- Depth stops automatically adjust to material thickness
- Accurate and easy to adjust fence system
- Hold down clamps and chip removal jet on pneumatic machine
- 4" dust collection port
- Equipped with quick-change chucks
- 110 volt, 220 volt, and 220 volt 3-phase motors available



Ecopress Drilling Machine

Description	Item #	Pkg.
110V single phase manual	91934-01	1
110V single phase pneumatic	91933-01	1
220V single phase manual	91935-01	1
220V single phase pneumatic	91931-01	1
220V three phase pneumatic	91932-01	1

Ecopress drill bits

American Bit Set for Hinge drilling

- 1 35mm Right Hand
- 2 8mm Left Hand



Ecopress Drill Bits

Diameter / Direction	Item #	Pkg.
35mm carbide - RH	00077-01	1
8mm carbide - LH	00160-01	1
American bit set (1 x 35mm RH, 2 x 8mm LH)	00213-01	1
35mm carbide - RH (2-flute, no tip)	00231-01	1

Extension Bars



Extension Bars

For use with Ecopress			
	Reference #	Item #	Box Qty.
Type 1	360mm - 1360mm	37535-01	1
Type 2	1360mm - 2360mm	37536-01	1

Additional Stops, left and right



Additional Stops

For use with Ecopress		
	Item #	Box Qty.
Left	89610-01	1
Right	89510-01	1

Grass TEC

Installation Tools

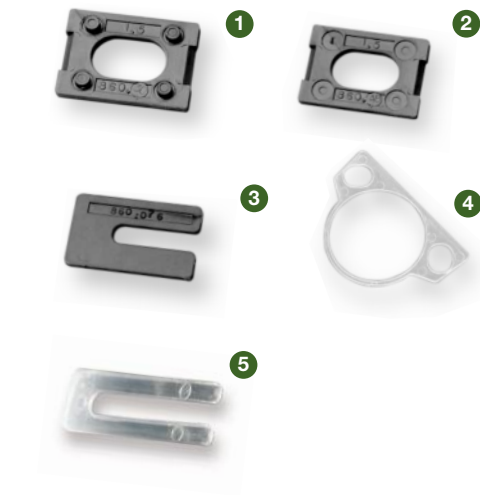
Insertion Dies for Ecopress



TEC 860 Insertion Die - TEC 861, 862, and 864

For use with Ecopress

	Reference #	Item #	Box Qty.
1	TEC 860 I/D Plastic	30683-01	1
2	TEC 860 I/D Aluminum	00012-01	1



Spacers

	Description	Item #	Pkg.
1	860-030 1.5mm [1/16"] thick, with locating pins	88881-42	200
2	860-048 1.5mm [1/16"] thick, without locating pins	00264-42	200
3	860-076 1.5mm [1/16"] thick, slotted	00047-42	200
4	1.5mm [1/16"] thick, hinge cup spacer	00284-42	200
5	1.5mm [1/16"] thick, slotted for MDF hinge	00209-42	100



Screws

	Description	Item #	Pkg.
1	#6 x 1/2" Flat head, Nickel	81014-43	500
2	#6 x 5/8" Flat head, Nickel	81001-43	500
3	#8 x 3/4" Round head, Self-drilling, Zinc	81018-43	500
4	#8 x 3/4" Pan head, Self-drilling, Zinc	81006-43	500
5	#8 x 3/4" Washer head, Nickel	81010-43	500
6	#10 x 3/4" Pan head, Nickel	81007-43	500



G*GRASS

The star in your cabinet

tec

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