



# TEC SOFT-CLOSE AND TEC SELF-CLOSE

TEC Face Frame Hinge System Established quality with functional benefits for today's modern cabinetry.







The perfect solution for your face fame cabinetry. TEC Soft-close, with an integrated soft closing action, and TEC Self-close hinge lines offer a complete range of quality hinges made in the USA.

The TEC hinge system offers a proven technology that makes TEC the first product choice among face frame hinge systems. Quiet and effortless closing action is guaranteed every time with TEC Soft-close hinges. Sleek in design, the Soft-close mechanism is pre-mounted in the hinge cup offering three levels of adjustment. TEC Soft-close and Self-close include 3-dimensional adjustment and a variety of overlays to meet your hinge needs. Made in the USA, TEC hinges are built to last.



# TEC SOFT-CLOSE AND TEC SELF-CLOSE HINGE SYSTEMS

Made in the USA, the TEC hinge systems offer a solution for every application in kitchen, bath, and residential cabinetry.





# TEC Soft-close – the unique face frame hinge with adjustable soft-close action

The TEC Soft-close hinge system is a revolutionary face frame hinge with the soft-closing mechanism pre-mounted into the interior of the hinge cup. An adjustment switch located on the face of the hinge regulates the closing action of the door. Integrated Soft-close combined with the adjustment feature provides functional benefits for today's modern cabinetry. Made in the USA, your doors will close softly, quietly, and consistently with TEC Soft-close.

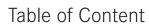
# Innovative 3-tiered adjustment

TEC Soft-close hinges feature a 3-tiered adjustment switch enabling you to regulate the closing action of the door. These adjustments provide different levels of damping resistance in the soft-close mechanism. Set at the highest level, the damping system has the most resistance and provides the longest closing action. To achieve less resistance you can place the adjustment switch at the medium level or lower level. The settings can be different for each hinge on the door so that you can achieve the maximum benefit in your closing action regardless of the size or weight of the door.

# TEC Self-close hinge system offers a solution for every cabinet application

The TEC 860 family includes a variety of hinges with 3-dimensional adjustment to hinges used for MDF material. Each hinge is 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 systems work on a variety of doors with profiled door edges. Made in the USA, TEC hinges are engineered to last.

# **TEC Hinges**





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108°		TEC 864 Soft-close  • 1/4" to 1" overlay  • 42mm and 45mm boring patterns	<ul> <li>Height adjustment (+1mm/-2mm)</li> <li>Side adjustment (±1.5mm)</li> <li>Depth adjustment (+2.5mm/5mm)</li> </ul>	10
108°		TEC 864 Soft-close  1 1/4" to 1 1/2" overlay  42mm and 45mm boring patterns	<ul> <li>Height adjustment (±2mm)</li> <li>Side adjustment (±1.5mm)</li> <li>Depth adjustment (+3mm)</li> </ul>	12
108°		TEC 863 Face Mount Soft-close and Self-close 1 7/16" minimum overlay 42mm and 45mm boring patterns	<ul> <li>Height adjustment (±2mm)</li> <li>Side adjustment (±1.5mm)</li> </ul>	14
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		UniSoft  • For all face frame overlay cabinets  • For full overlay frameless cabinets	Adjustable closing speed	24
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# **Features and Benefits**

# TEC Soft-close

# Features

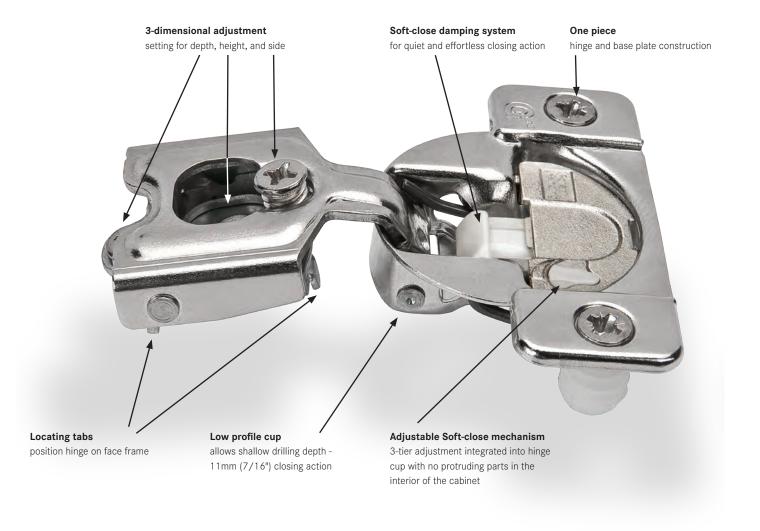


**TEC Soft-close** hinges are made in the USA of durable and long-lasting materials with time-tested design and manufacturing techniques. Every mechanism is tested for reliability and the user experience.

- One piece hinge and base plate combination
- 3-tier Soft-close adjustment
- 42 and 45mm boring patterns
- For face frame cabinetry
- · Made in the USA

**TEC Soft-close** hinges are offered in these overlays:

1/4", 7/16", 1/2", 5/8", 3/4", 1", 1 1/4", 1 5/16", 1 3/8", 1 1/2"



# **Features and Benefits**



TEC Self-close

# Features

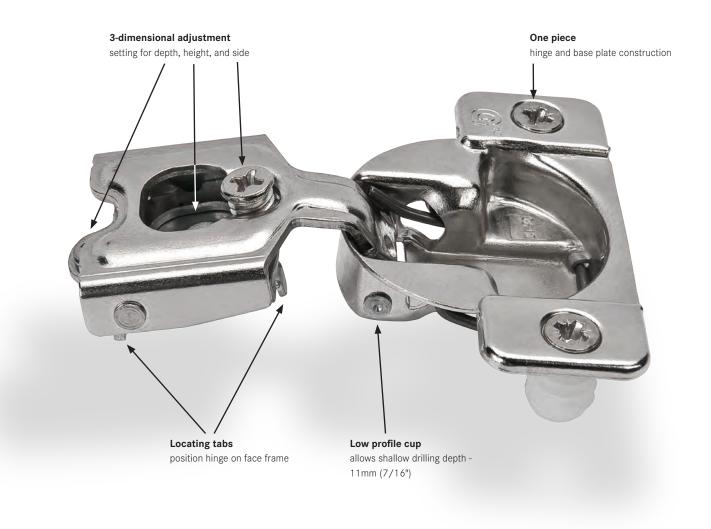


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- 42 and 45mm boring patterns
- For face frame cabinetry
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# **TEC Self-close** hinges are offered in these overlays:

1/4", 7/16", 1/2", 9/16", 5/8", 3/4", 1", 1 1/4", 1 5/16", 1 3/8", 1 1/2"



# **Technical Information**

# **TEC Hinges**

# Technical Information

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:

Door overlay

## Adjustment requirements:

- · Height and side
- · Height, side, and depth

## Base plate mounting to face frame:

- Wrap-around 3/4" thick frames only
- Side mount frames thicker than 3/4"
- Face mount any overlay greater than 1 7/16"
- MDF material mounting into end grain

#### Door removal:

- With base plate mounting screw (one-piece hinges)
- With depth adjustment screw (two-piece hinges)

# Door clearance/hinge arm clearance

(for interior rollout trays)

#### Door gap

distance between face frame and the back of the closed door

#### Minimum reveal

distance between two doors hinged back to back

#### Door thickness

thicker doors can restrict opening angle and minimum reveal

Hinge cup boring pattern for dowelled hinges

Door opening angle

Soft-closing or Self-closing

## Number of Hinges per Door

The number of hinges is determined by the door height, door weight, quality of the door material, and the fixing of the cup and base plate.

The load and height data refer to 24" standard door widths.

The table refers to hinges with and without integrated dampers.

Grass strongly recommends a trial mount for all hinges and base plates.

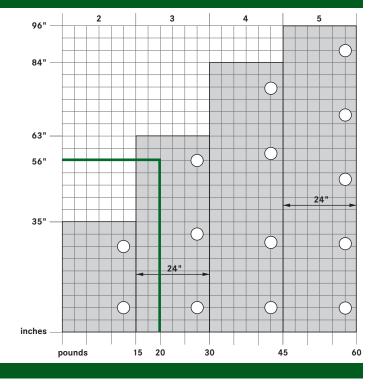
Attach base plates using all available screw holes.

# Example:

For doors measuring 56"  $\times$  24" and weighing 19 lbs, Grass recommends the installation of 3 hinges.

**Note:** The distance between the top and bottom hinge must be greater than the width of the door.

The **TEC** hinge meets and exceeds the minimum requirements of ANSI/BHMA A156.9 Standard.



## Features

#### 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 11mm ( $^{7}/_{16}$ ") cup to accommodate profiled door edge. There are no protruding parts from the hinge cup.

# Interchangeable

**TEC Soft-close** and **Self-close** have the same boring pattern so no change is necessary in your existing setup.

#### All-steel Construction

3-dimensional adjustment is built into the 864 and 872 hinge series.

2-dimensional adjustment is available for 861 MDF and 863 hinge series.

## Integrated Soft-close

The Soft-close damper is pre-mounted in the hinge cup.

No additional installation of the Soft-close is required.

A 3-tiered adjustment switch allows various levels of resistance in the damping system.

#### Made in the USA

TEC hinges are manufactured at the Grass facility in Kernersville, NC.

# **Technical Information**

# G\*

# **TEC Hinges**

# Adjustments

TEC hinges offer a convenient 3-dimensional adjustment.

1 Side Adjustment

Rotate cam adjustment screw.

2 Height Adjustment

Loosen screw, align door, tighten screw.

3 Depth Adjustment

Rotate cam screw.

4 TEC Soft-close hinges offer an adjustable 3-tier closing mechanism.

# **Soft-close Tension**

Light, Medium, and Strong settings



# LIGHT



This is the **"LIGHT"** setting for the Soft-closing mechanism.

Set here for light or small doors with very little closing pressure.



# MEDIUM



This is the **"MEDIUM"** setting for the Soft-closing mechanism. Set here for average size doors with normal closing pressure.



# **STRONG**



This is the **"STRONG"** setting for the Soft-closing mechanism. Set here for larger or heavier doors with a strong closing pressure.

(Factory Setting)

**Note:** To reset the Soft-close damper, move the adjustment switch to "STRONG", then to the desired position. Close the door and the Soft-close will be reset.

# **TEC 864 Soft-close**

# 108° Opening Angle - 1/4" to 1" Overlay



- Soft-close damper is pre-mounted in the hinge cup
- Adjustment switch to regulate closing action
- One piece hinge and base plate combination
- 3-dimensional adjustment
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- Cam side adjustment
- · Cam depth adjustment
- Height adjustment at mounting screw
- · Works with current GRASS insertion machinery
- · Made in the USA







Side-moun	t - 45mm Drilling	Pattern				
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	Cup (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description
12.7 (1/2")	3.5 (1/8)	11 (7/16")	TEC 864-VS8-45U 1/2 SM A-SC	02750A-15	300	TEC 864-VS-
16 (5/8")	0.3 (1/32")	11 (7/16")	TEC 864-VS8-45U 5/8 SM A-SC	01995A-15	300	

Screw-on Hinge Cup (VS)				
Description	Item No.	PU		
TEC 864-VS-45U 1/2 SM A-SC	04423A-15	300		
-	-	-		







Wrap-arou	nd - 45mm Drillin	g Pattern						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	Dowelled Hinge Cup (VS8)		Screw-on Hinge Cup (VS)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description	Item No.	PU
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-45U 1/4 WM A-SC	02791A-15	300	TEC 864-VS-45U 1/4 WM A-SC	04429A-15	300
11 (7/16")	5.1 (13/64")	11 (7/16")	TEC 864-VS8-45U 7/16 WM A-SC	02858A-15	300	TEC 864-VS-45U 7/16 WM A-SC	02670A-15	300
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-45U 1/2 WM A-SC	02870A-15	300	TEC 864-VS-45U 1/2 WM A-SC	04431A-15	300
19 (3/4")	0	11 (7/16")	TEC 864-VS8-45U 3/4 WM A-SC	02875A-15	300	TEC 864-VS-45U 3/4 WM A-SC	04432A-15	300
25 (1")	0	11 (7/16")	TEC 864-VS8-45U 1 WM A-SC	02745A-15	300	TEC 864-VS-45U 1 WM A-SC	04441A-15	300





Side-mount - 42mm Drilling Pattern						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	up (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-42U 1/2 SM A-SC	02749A-15	300	

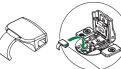
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No Hammer	

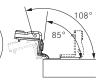
Wrap-around - 42mm Drilling Pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	up (VS8)	
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-42U 1/4 WM A-SC	02788A-15	300
11 (7/16")	5.1 (13/64")	11 (7/16")	TEC 864-VS8-42U 7/16 WM A-SC	02809A-15	300
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-42U 1/2 WM A-SC	02824A-15	300
19 (3/4")	0	11 (7/16")	TEC 864-VS8-42U 3/4 WM A-SC	02825A-15	300
25 (1")	0	11 (7/16")	TEC 864-VS8-42U 1 WM A-SC	02834A-15	300

 Description
 Item No.
 PU

 85° Angle reduction clip
 80125-42
 100

Reduces opening angle to 85°





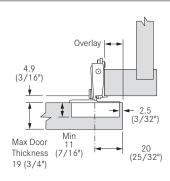
See page 27 for installation instructions.

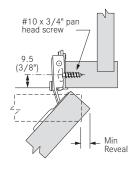
PU - Packaging unit



#### Minimum Reveal

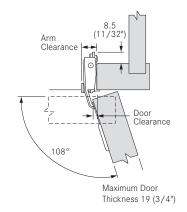
#### Clearances - Door Oper





#### **TEC 864 Minimum Reveal**

Door Thickness 16 (5/8") 17.5 (11/16") 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 10.

**Overall Dimensions** 

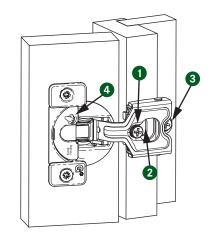
# Adjustments

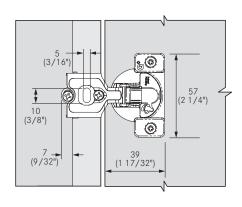
- 1 Side Adjustment +/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- **3** Depth Adjustment +2.5mm (3/32"), -5mm (1/32") Rotate cam screw.
- 4 Soft-close Tension

Light, Medium, and Strong setting
See page 9 for complete adjustment explanation

# **Mounting Screws**

Hinge cup to door, #6 x 5/8" Flat head screw Base plate to face frame, #10 x 3/4" Pan head screw

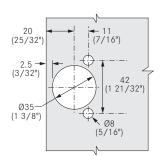




#### Base Plates

#### **Drilling Pattern**

# Wrap-around Base Plate Side-Mount Base Plate



42mm Drilling Pattern

# 20 (25/32") 2.5 (3/8") 2.5 (1 25/32") 035 (1 3/8") 08 (5/16")

45mm Drilling Pattern

# IMPORTANT

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

# **TEC 864 Soft-close**

# 108° Opening Angle - 11/4" to 11/2" Overlay



- Soft-close damper is pre-mounted in the hinge cup
- Adjustment switch to regulate closing action
- One piece hinge and base plate combination
- 3-dimensional adjustment
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- Cam side adjustment
- Cam depth adjustment
- Height adjustment at mounting screw
- · Works with current GRASS insertion machinery
- · Made in the USA





Side-mount - 45mm Drilling Pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hin	ge Cup (VS8)	
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 SM A-SC	02780A-15	300
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-45U 1 3/8 SM A-SC	02785A-15	300





Wrap-arour	ıd - 45mm Drilling	g Pattern						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	up (VS8)		Screw-on Hinge	Cup (VS)	
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 WM A-SC	02910A-15	300	TEC 864-VS-45U 1 1/4 WM A-SC	04547A-15	300
33.5 (1 5/16")	0	10 (13/32")	TEC 864-VS8-45U 1 5/16 WM A-SC	02198A-15	300	TEC 864-VS-45U 1 5/16 WM A-SC	02176A-15	300
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-45U 1 3/8 WM A-SC	02782A-15	300	TEC 864-VS-45U 1 3/8 WM A-SC	04548A-15	300
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-45U 1 1/2 WM A-SC	02805A-15	300	TEC 864-VS-45U 1 1/2 WM A-SC	04549A-15	300



No Hammer

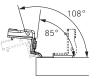
Side-mount - 42mm Drilling Pattern					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	up (VS8)	
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 SM A-SC	02838A-15	300

Angle Reduction Clip					
Description	Item No.	PU			
85° Angle reduction clip	80125-42	100			

Reduces opening angle to 85°







See page 27 for installation instructions.

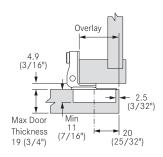
Wrap-around - 42mm Drilling Pattern
3

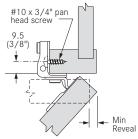
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)				
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
32 (1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 WM A-SC	02836A-15	300		
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-42U 1 1/2 WM A-SC	02839A-15	300		

PU - Packaging unit



# Clearances - Door Open



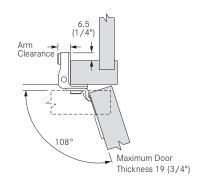


#### **TEC 864 Minimum Reveal**

Door Thickness 16 (5/8") 17.5 (11/16") 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.

**Overall Dimensions** 

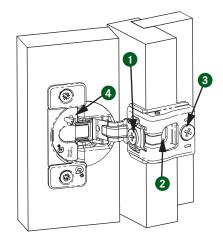


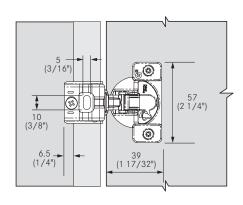
- **1** Side Adjustment +/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Depth Adjustment +3mm (1/8") Rotate cam screw.
- 4 Soft-close Tension

Light, Medium, and Strong setting See page 9 for complete adjustment explanation

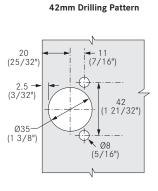
# **Mounting Screws**

Hinge cup to door, #6 x 5/8" Flat head screw Base plate to face frame, #10 x 3/4" Pan head screw

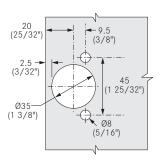




# Wrap-around Base Plate Side-Mount Base Plate



# 45mm Drilling Pattern



# **IMPORTANT**

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

# **TEC 863 Soft-close/Self-close**

# 108° Opening Angle - Face-mount



- Available in Soft-close and Self-close
- Soft-close damper is pre-mounted in the hinge cup
- Adjustment switch on Soft-close to regulate closing action
- One piece hinge and base plate combination
- 2-dimensional adjustment
- 11mm (7/16") cup drilling depth
- Height adjustment at mounting screw
- For overlays 1 7/16" and greater
- 85° angle reduction clip available for Soft-close and Self-close
- Made in the USA





Face-moun	Face-mount - 45mm Drilling Pattern Soft-close											
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on						
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description						
37 (1 7/16")	0	0	TEC 863-VS8-45U 1 7/16 FM A-SC	02294A-15	300	TEC 863-VS-45U 1 7/16 FM						

Screw-on Hinge Cup (VS)							
Description	Item No.	PU					
TEC 863-VS-45U 1 7/16 FM A-SC	02295A-15	300					





race-moun	race-mount - 45mm Drilling Pattern Self-close											
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge	Cup (VS)					
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description	Item No.	PU				
37 (1 7/16")	0	0	TEC 863-VS8-45U 1 7/16 FM	02283-15	300	TEC 863-VS-45U 1 7/16 FM	02284-15	300				



Face-mount - 42mm Drilling Pattern Self-close										
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)							
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU					
37 (1 7/16")	0	0	TEC 863-VS8-42U 1 7/16 FM	02282-15	300					

Angle Reduction Clip								
Description	Item No.	PU						
85° Angle reduction clip	80125-42	100						

Reduces opening angle to 85°

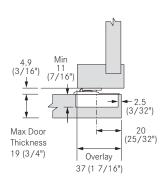


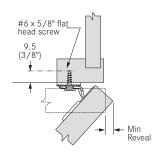
See page 27 for installation instructions.



#### Minimum Reveal

#### Clearances - Door Oper



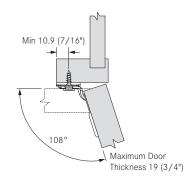


#### **TEC 863 Minimum Reveal**

 Door Thickness
 16 (5/8")
 17.5 (11/16")
 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 14.

**Overall Dimensions** 

# Adjustments

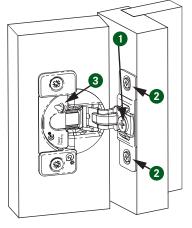
- 1 Side Adjustment +/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Soft-close Tension

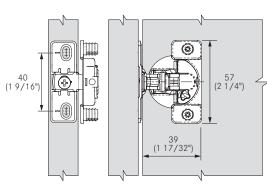
Light, Medium, and Strong setting
See page 9 for complete adjustment explanation

# **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 = 37 (1 7/16") when base plate is flush inside edge of face frame.



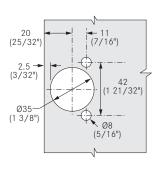


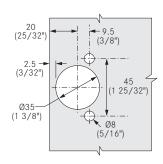
Base Plates

#### **Drilling Pattern**

# 42mm Drilling Pattern







# **IMPORTANT**

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

# **TEC 864 Self-close**

# 108° Opening Angle - 1/4" to 1" Overlay



- One piece hinge and base plate combination
- 3-dimensional adjustment
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- · Cam side adjustment
- Cam depth adjustment
- Height adjustment at mounting screw
- Works with current GRASS insertion machinery
- Made in the USA





Side-Illouil	t - 45 mm Drilling	rattern				<u> </u>	·		
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)			
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description	Item No.	PU	
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-45U 1/4 SM	02851-15	300	TEC 864-VS-45U 1/4 SM	04386-15	300	
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-45U 1/2 SM	02872-15	300	TEC 864-VS-45U 1/2 SM	04387-15	300	
16 (5/8")	0.3 (1/32")	11 (7/16")	TEC 864-VS8-45U 5/8 SM	01864-15	300	TEC 864-VS-45U 5/8 SM	01418-15	300	
19 (3/4")	0	11 (7/16")	TEC 864-VS8-45U 3/4 SM	02878-15	300	TEC 864-VS-45U 3/4 SM	04390-15	300	
25 (1")	0	11 (7/16")	TEC 864-VS8-45U 1 SM	02885-15	300	TEC 864-VS-45U 1 SM	04395-15	300	

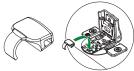
Wrap-arour	Wrap-around - 45 mm Drilling Pattern											
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)						
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description	Item No.	PU				
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-45U 1/4 WM	02847-15	300	TEC 864-VS-45U 1/4 WM	04396-15	300				
11 (7/16")	5.1 (13/64")	11 (7/16")	TEC 864-VS8-45U 7/16 WM	02904-15	300	-	-	-				
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-45U 1/2 WM	02905-15	300	TEC 864-VS-45U 1/2 WM	04399-15	300				
19 (3/4")	0	11 (7/16")	TEC 864-VS8-45U 3/4 WM	02907-15	300	TEC 864-VS-45U 3/4 WM	04400-15	300				
25 (1")	0	11 (7/16")	TEC 864-VS8-45U 1 WM	02882-15	300	TEC 864-VS-45U 1 WM	04401-15	300				

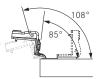
Side-mount - 42 mm Drilling Pattern										
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)							
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU					
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-42U 1/2 SM	02871-15	300					
25 (1")	0	11 (7/16")	TEC 864-VS8-42U 1 SM	02884-15	300					

Wrap-around - 42 mm Drilling Pattern										
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)							
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU					
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-42U 1/4 WM	02846-15	300					
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-42U 1/2 WM	02869-15	300					
19 (3/4")	0	11 (7/16")	TEC 864-VS8-42U 3/4 WM	02873-15	300					
25 (1")	0	11 (7/16")	TEC 864-VS8-42U 1 WM	02879-15	300					

Angle Reduction Clip							
Description	Item No.	PU					
85° Angle reduction clip	80125-42	100					

Reduces opening angle to 85°



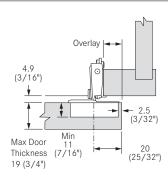


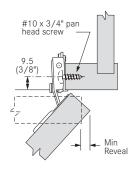
See page 27 for installation instructions.



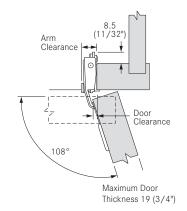
#### Minimum Peveal

#### Clearances - Door Oper





#### **TEC 864 Minimum Reveal**



Arm and door clearances see page 16.

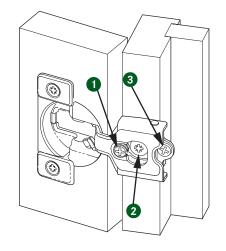
**Overall Dimensions** 

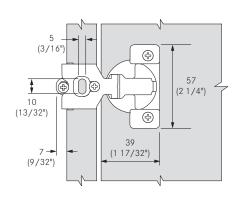
# Adjustments

- 1 Side Adjustment +/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Depth Adjustment +2.5mm (3/32"), -5mm (1/32") Rotate cam screw.

# **Mounting Screws**

Hinge cup to door, #6 x 5/8" Flat head screw Base plate to face frame, #10 x 3/4" Pan head screw

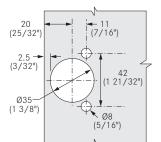




# Base Plates

#### **Drilling Pattern**





42mm Drilling Pattern

# 20 (25/32") -9.5 (3/8") (3/8") (3/32") (1/25/32") (1/25/32") (1/25/32")

45mm Drilling Pattern

# **IMPORTANT**

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

# **TEC 864 Self-close**

# 108° Opening Angle - 11/4" to 11/2" Overlay



- One piece hinge and base plate combination
- 3-dimensional adjustment
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- · Cam side adjustment
- Cam depth adjustment
- Height adjustment at mounting screw
- Works with current GRASS insertion machinery
- · Made in the USA





Side-mount	Side-mount - 45mm Drilling Pattern										
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)								
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU						
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 SM	02894-15	300						
33.5 (1 5/16")	0	10 (13/32")	TEC 864-VS8-45U 1 5/16 SM	01094-15	300						
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-45U 1 3/8 SM	02898-15	300						
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-45U 1 1/2 SM	02903-15	300						

Screw-on Hinge Cup (VS)					
Description	Item No.	PU			
TEC 864-VS-45U 1 1/4 SM	04466-15	300			
-	-	-			
TEC 864-VS-45U 1 3/8 SM	04468-15	300			
TEC 864-VS-45U 1 1/2 SM	04469-15	300			





Overlay	Door Clearance	Arm Clearance	Dowelled Hinge (	Cup (VS8)	
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 WM	02887-15	300
33.5 (1 5/16")	0	10 (13/32")	TEC 864-VS8-45U 1 5/16 WM	01095-15	300
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-45U 1 3/8 WM	02896-15	300
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-45U 1 1/2 WM	02901-15	300

Screw-on Hinge Cup (VS)					
Description	Item No.	PU			
TEC 864-VS-45U 1 1/4 WM	04493-15	300			
-	-	-			
TEC 864-VS-45U 1 3/8 WM	04498-15	300			
TEC 864-VS-45U 1 1/2 WM	04499-15	300			









Angle Reduction Clip	_	_
Description	Item No.	PU
85° Angle reduction clip	80125-42	100

Reduces opening angle to 85°







See page 27 for installation instructions.

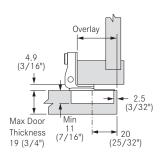
Wrap-arou	nd - 42mm Drilling	g Pattern
0	D Cl	A Cl-

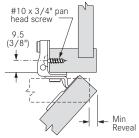
Wran-around - 45mm Drilling Pattern

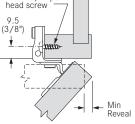
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 WM	02886-15	300

PU - Packaging unit

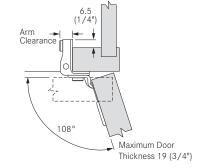












#### **TEC 864 Minimum Reveal**

Door Thickness 16 (5/8") 17.5 (11/16") 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 18.

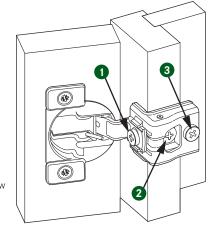
**Overall Dimensions** 

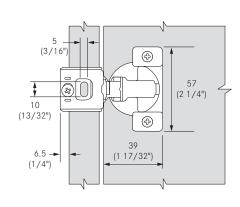
# Adjustments

- **1** Side Adjustment +/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Depth Adjustment +3mm (1/8") Rotate cam screw.

# **Mounting Screws**

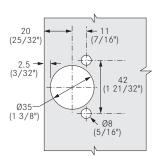
Hinge cup to door, #6 x 5/8" Flat head screw Base plate to face frame, #10 x 3/4" Pan head screw



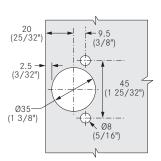


# Base Plates





42mm Drilling Pattern



45mm Drilling Pattern

# **IMPORTANT**

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

# **TEC 861 for MDF Frame Material, Self-close**

# 108° Opening Angle



- Patented wrap-around base plate prevents splitting of frame material
- One piece hinge and base plate combination
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- Works on frame thicknesses: 12.7mm (1/2"), 16mm (5/8"), and 19mm (3/4")
- Works with current GRASS machinery
- 85° angle reduction clip available
- Made in the USA



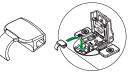
Wrap-around - 42mm Drilling Pattern							
Frame Thickness	Overlay	Door Clearance	Arm Clearance	Dowel	led Hinge Cup (VS8)		
mm (inch)	mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
12.7 (1/2")	12.7 (1/2")	3 (1/8")	7.5 (9/32")	TEC 861-VS8-42U 1/2 FT	04742-14	250	
16 (5/8")	12.7 (1/2")	3 (1/8")	7.5 (9/32")	TEC 861-VS8-42U 5/8 FT	04743-14	250	
19 (3/4")	12.7 (1/2")	3 (1/8")	7.5 (9/32")	TEC 861-VS8-42U 3/4 FT	04744-14	250	

Spacer and screws						
	Description	Item No.	PU			
Spacer	1.5 mm (1/16") slotted for MDF 861, clear	00209-42	100			
Screw	No. 8 x 3/4" Round head, self drilling, zinc	81018-43	500			
Screw	No. 8 x 5/8" Round head, truss quad, self drilling, zinc	81017-43	500			



Reduces opening angle to 85°

Angle Reduction Clip			
Description	Item No.	PU	
85° Angle reduction clip	80125-42	100	





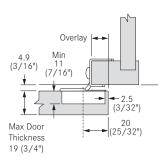
See page 27 for installation instructions.

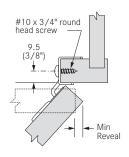
Dimensions in millimeters, fractional inch equivalents as noted.



Minimum Peveal

Clearances - Door Open



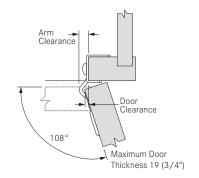


# TEC 861 Minimum Reveal

 Door Thickness
 16 (5/8")
 17.5 (11/16")
 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 20.

**Overall Dimensions** 

# Adjustments

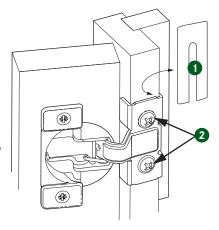
# Side Adjustment

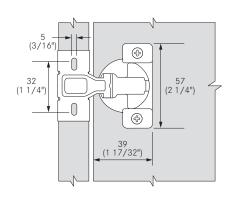
Decreasing overlay achieved with use of 1.5 mm (1/16) spacer

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, #10 x 3/4" Pan head screw

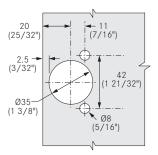




Base Plates

Drilling Pattern

# 42mm Drilling Pattern



# **IMPORTANT**

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

# **TEC 872 Self-close**

# 110° Opening Angle



- 1/2" overlay achievable on profile door
- Available in 45mm boring pattern
- 3-dimensional hinge
- All metal construction, nickel finish
- Height adjustment in elongated screw hole
- Minimal gap between the door and frame
- Minimal protrusion into cabinet
- Hinge and base plate must be ordered separately



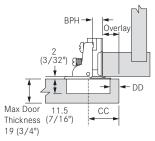


# TEC 872 Opening Angle 110°

Dowelled Hinge Cup	(VS8)		Screw-on Hinge Cu	ıp (VS)	
Description	Item No.	PU	Description	Item No.	PU
TEC 872-VS8-45	43729-17	500	TEC 872-VS-45	43727-17	500

Side-mount Base Plates					
Plate Height	Description	Item No.	PU		
04	872-22 Side-mount, 1/2" overlay	43731-43	500		





Cup Center (CC) = DD + 1/2 (Cup diameter) Drilling Distance (DD)

> 5 6 7

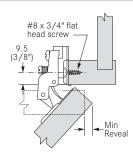
4 4

Base Plate Height (BPH)

4

3 4

4



#### **TEC 872 Minimum Reveal**

Door Clearance Maximum Door Thickness 19 (3/4")

6.5 (1/4")

Door Thickness 16 (5/8") Minimum Reveal 4.2 (5/32") 5.4 (7/32") Based on door with square edge.

Adjustments

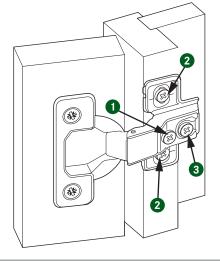
Door Overlay Max

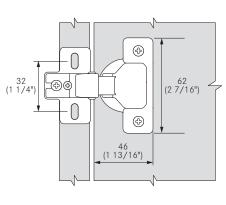
Overall Dimensions

- 1 Side Adjustment +/-2mm (3/32") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Depth Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.

# **Mounting Screws**

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





**Drilling Pattern** 

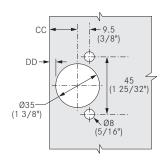
17.5 (11/16") 19 (3/4")

6.7 (1/4")

45mm Drilling Pattern

# **IMPORTANT**

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



# **UniSoft**

# Soft-close for doors



- Works for face frame cabinets on all door overlays
- Works for frameless cabinets on full overlay doors
- Brushed nickel look blends in well with hinge finish
- Non-handed with a low profile design
- Manually adjustable to desired closing speed
- Mounts independently from the hinge in the upper corner of the cabinet
- Instantly allows the cabinet door to close quietly and smoothly
- Scratch protector and front bumper with cushion for a quiet close

# Unisoft Adapter



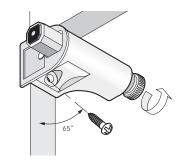
Description	Material	Item No.	PU
Unisoft, Polybag	Plastic, chrome	18971-37	1
Unisoft, Polybag Bulk	Plastic, chrome	18971-40	25
Unisoft, Bulk	Plastic, chrome	18971-14	250

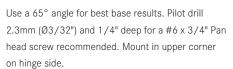
Includes #6 x 3/4 Pan head screw

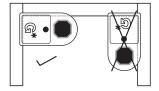
Installation

Mounting Position

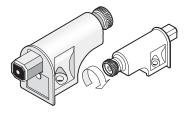
Adiustmen







**IMPORTANT** The installation of our cabinetry hardware must comply with the Grass instructions that are stated on this catalog page.



Turn adjustment screw to move damper in and out. Adjust in for heavier doors or out for light doors. Use Phillips or Pozidrive screwdriver or adjust manually.

# Dimensions UniSoft per Door Use one UniSoft for most applications. For heavier 17 (11/16") doors use two or more. Clearance Trial mount recommended. 0 30 (1 13/16") UniSoft OHinges 0 0 Adjustment Screw Front bumper with cushion 0 $\bigcirc$ PU - Packaging unit

# **Machinery**



# Grass PRO1 drilling and insertion machine for 45mm boring pattern

# Grass PRO1 for Hinge Drilling



- Depth stop can be adjusted to material thickness
- Functional design
- Easy, fast and efficient operation
- Easy maintenance
- 45mm boring pattern

Description	Item No.	PU
220v single phase pneumatic	94559-01	1
220v three phase pneumatic	94560-01	1
110v single phase pneumatic	94561-01	1



Description	Item No.	PU
Extension fence 300mm to 1550mm	88612-01	1

# **Drill Bits**





Description	Direction	Item No.	PU
1 35mm bit	RH	00077-01	1
2 8mm bit	LH	00160-01	1
American Bit Set for Hinge Drilling		00213-01	1

# Set consists of:

- 1 35mm bit, RH
- 2 8mm bit, LH

# Fence Stops





949.200.21.0000	1
949.200.21.0100	1
_	

# Insertion Dies











Description	Item No.	PU
Tiomos Universal Insertion Die 110°/120°/160°	80039	1
TEC Insertion Die	92617	1
Nexis Insertion Die 110°/125°	04216-01	1
Nexis Insertion Die 170°	04218-01	1
TEC Hand insertion tool	03987-01	1

PU - Packaging unit

# **Accessories and Assembly Aids**

# TEC

# Shelf Supports









Description	Item No.	PU
1 Plastic, clear, with steel pin	499.582.50.0050	5000
Metal spoon, nickel plated	499.582.50.2050	2000
3 Shelf support 7006/9.5, nickel	F069073460253	2500
H-802 plastic, square, clear	00036-43	500

# Bumper Pads

# Bumper Pads, Self-adhesive



Description	Height	Diameter	Item No.	PU
Bumper pad, clear	2.5mm	10mm	63407-99	288
Bumper pad, clear	2.5mm	10mm	63407-47	7200

# AirSoft Bumper Pads, Self-adhesive



Description	Height	Diameter	Item No.	PU
AirSoft Bumper pad, clear	5mm	12.7mm	63481-43	500
AirSoft Bumper pad, clear	5mm	12.7mm	63483-30	5000

# Bumper Pads, Self-adhesive





Description	Height	Diameter	Item No.	PU
Bumper pad, clear	1.5mm	7mm	630.000.03.0750	1088
Bumper pad, clear	4mm	12mm	630.000.02.1250	5000

# Bumper Pads, Self-adhesive



Description	Height	Diameter	Item No.	PU
Bumper pad, clear	3mm	12.7mm	31002-43	500
Bumper pad, clear	1.5mm	12.7mm	31004-43	500

# Door Stop



Description	Item No.	PU
H-950 door stop, clear	00068-43	500

# **Accessories and Assembly Aids**





# Cover Caps



Hole covers for 35mm cup drillings

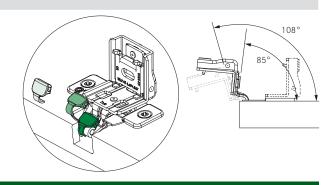
Description	Item No.	PU
35mm cover cap, white	22227-42	100

# Angle Reduction Clip



Reduces opening angle to  $85\,^\circ$ 

Description	Item No.	PU
85° Angle reduction clip	80125-42	100



# Spacers

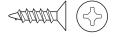


Description	Item No.	PU
860-048 1.5mm ( $^{1}/_{16}$ ") thick, without locating pins	00264-42	100
860-076 1.5mm (1/16") thick, slotted 00047-42 100	00047-42	100
1.5mm (1/16") thick, hinge cup spacer	00284-42	100
1.5mm (1/16") thick, slotted for MDF, clear	00209-42	100

# Screws

# Wood Screw, Nickel-plated





Description	Item No.	PU
#6 x 1/2" FHP, NI	81014-43	500
#6 x 5/8" FHP, NI	81001-43	500
#6 x 3/4" FHP, NI	81003-43	500
#6 x 1" FHP, NI	81004-43	500

#### Wood Screw, Nickel-plated









	Description	Item No.	PU
0	#10 x 3/4" PHP	81007-43	500
2	#8 x 5/8" Quad Round	81017-43	500

# G\*GRASS®

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