



## TEC HINGES



**G\*GRASS®**

### TEC SOFT-CLOSE AND TEC SELF-CLOSE

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







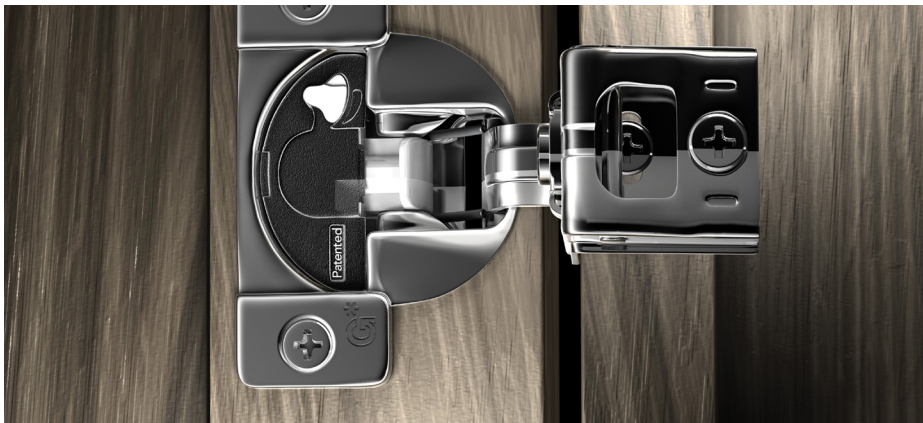
The perfect solution for your face frame cabinetry. TEC Soft-close, with an integrated soft closing action, and TEC Self-close hinge lines offer a complete range of quality hinges made in the USA.

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

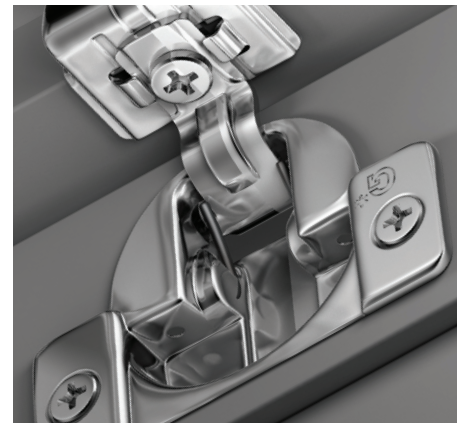


### **TEC Soft-close – the unique face frame hinge with adjustable soft-close action**

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**






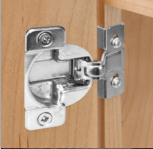

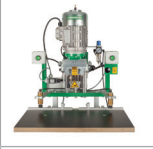

TEC Soft-close hinges feature a 3-tiered damping adjustment switch enabling you to customize the closing action of the door. These adjustments provide different levels of damping resistance in the soft-close mechanism. Set at the strongest level, the damping system has the most resistance and provides the longest closing action. To achieve less resistance you can place the adjustment switch at the medium level or light 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**

From 3-dimensional adjustability to MDF-compatible models, the TEC 860 family of self-close hinges offers a full range of configurations and features to meet your specifications. 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.

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# Features and Benefits

## TEC Soft-close

### Features

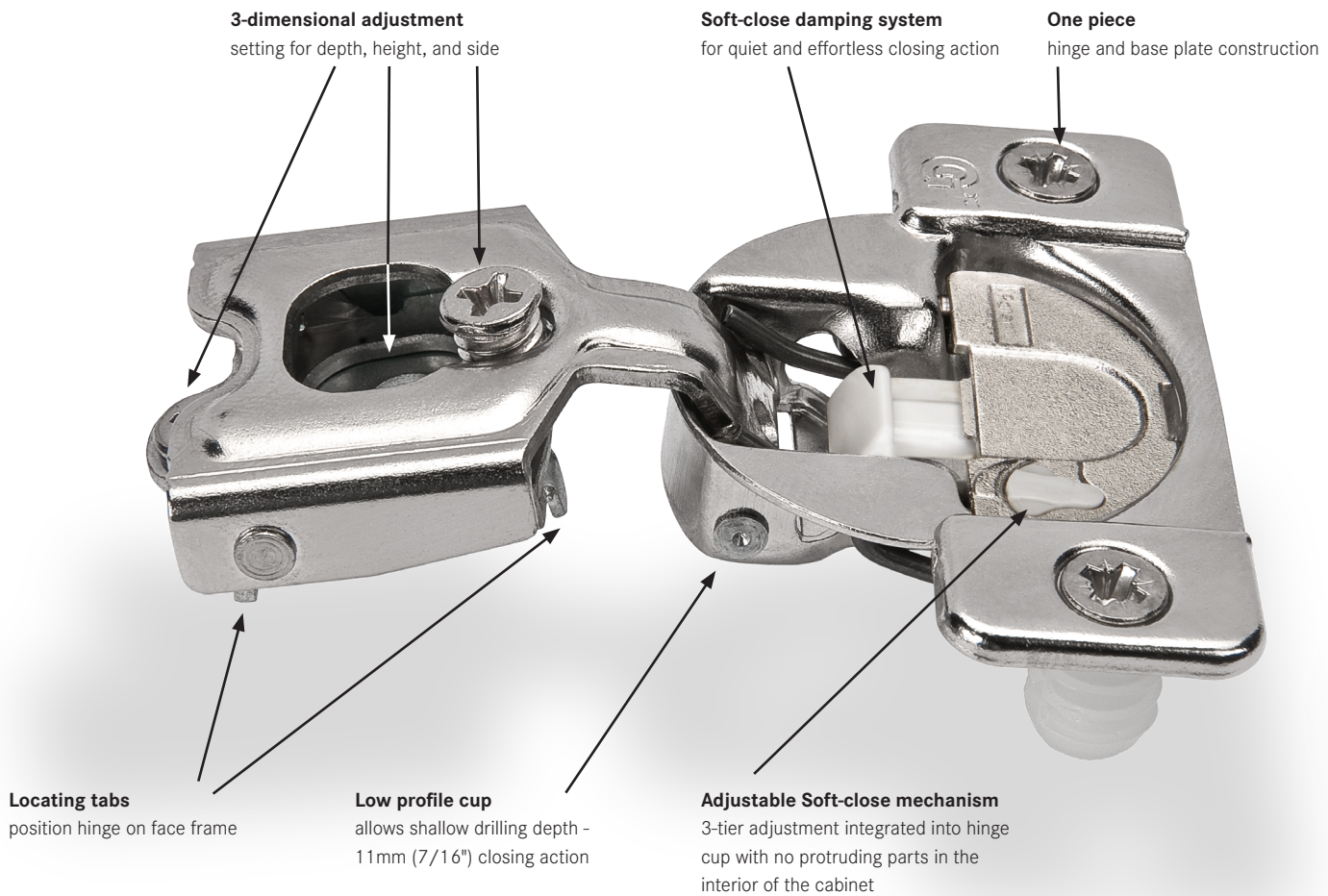


**TEC Soft-close** hinges are made in the USA of durable and long-lasting materials with time-tested design and manufacturing techniques. Every mechanism is tested for reliability and the user experience.

- 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

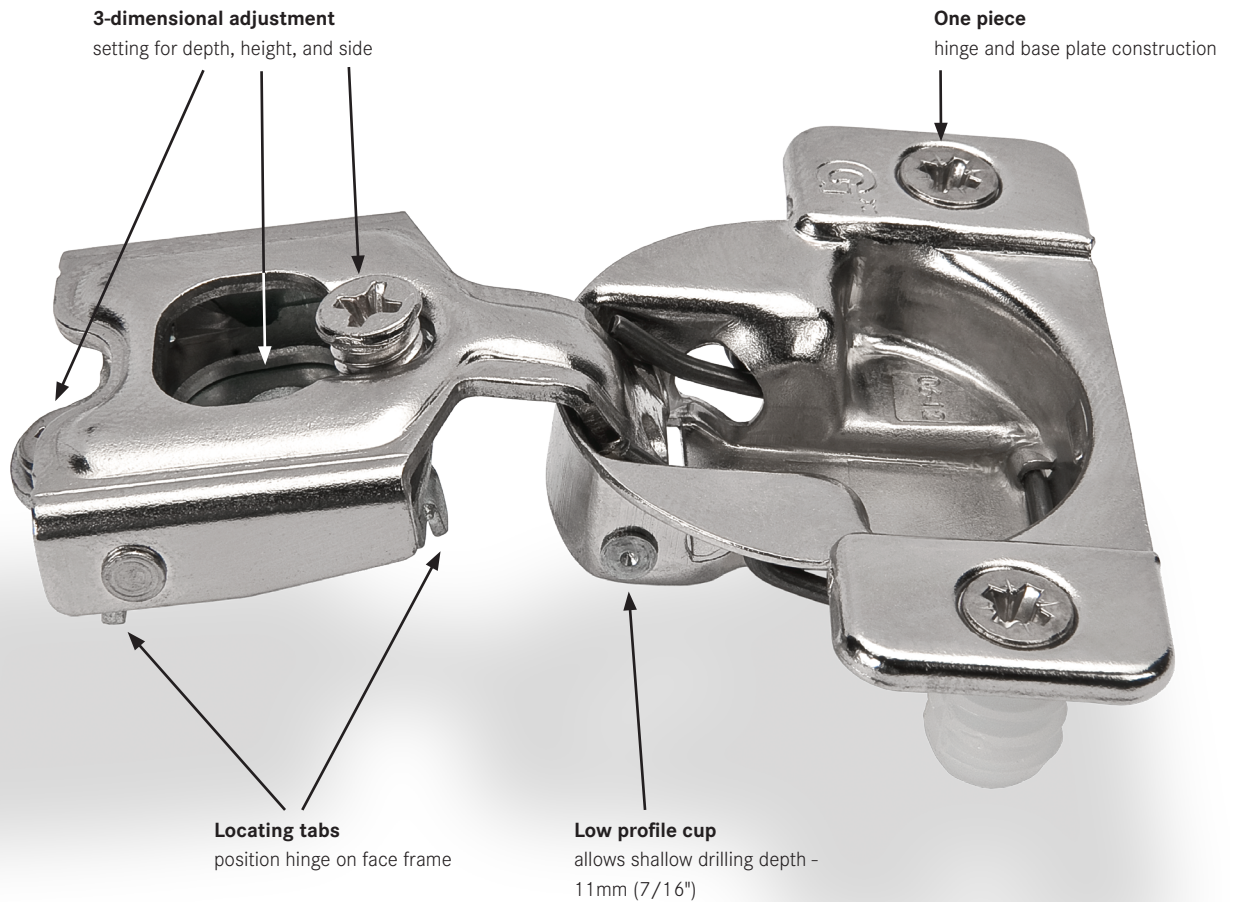


**TEC Self-close** hinges are made in the USA of durable and long-lasting materials with time-tested design and manufacturing techniques. Every mechanism is tested for reliability and the user experience.

- One piece hinge and base plate combination
- 42 and 45mm boring patterns
- For face frame cabinetry
- Made in the USA

**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.

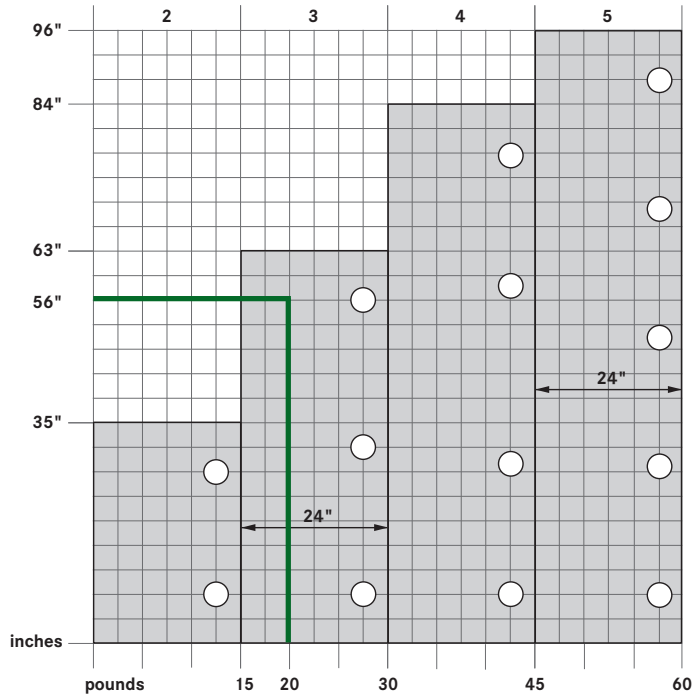
Attach base plates using all available screw holes.

#### Example:

For doors measuring 56" x 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 11 mm ( $\frac{7}{16}$ ") 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.

#### Adjustments

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

## 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.

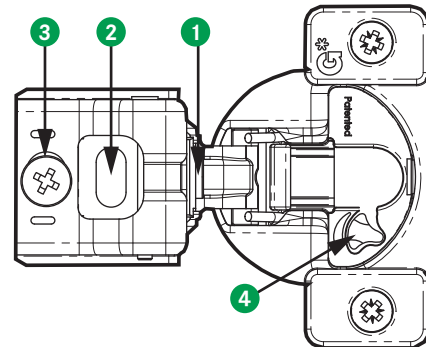
**3 Depth Adjustment**

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
- 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 Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			Description	Item No.	PU	Description	Item No.	PU
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-45U 1/2 SM A-SC	04423A-15	300
16 (5/8")	0.3 (1/32")	11 (7/16")	TEC 864-VS8-45U 5/8 SM A-SC	01995A-15	300	-	-	-



## Wrap-around - 45mm Drilling Pattern

Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			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 Cup (VS8)		
			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



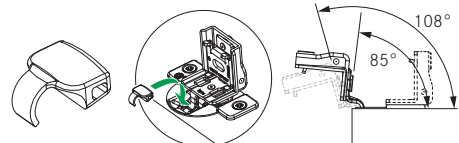
## Wrap-around - 42mm Drilling Pattern

Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)		
			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
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

## Angle Reduction Clip

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

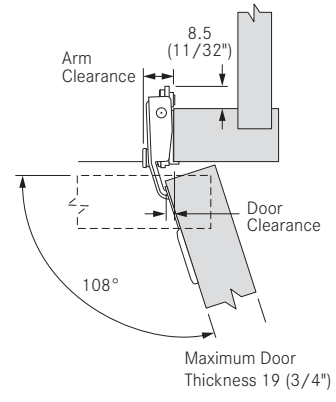
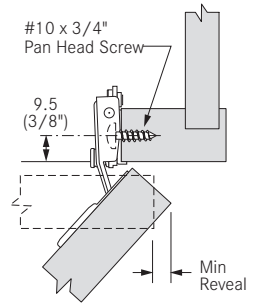
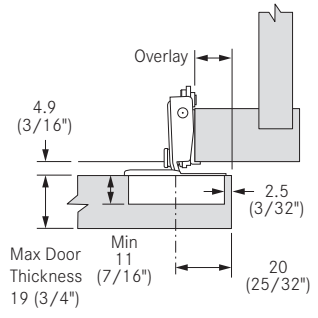
Reduces opening angle to 85°



See page 27 for installation instructions.

PU - Packaging unit

**Dimensions - Door Closed      Minimum Reveal      Clearances - Door Open**



**TEC 864 Minimum Reveal**

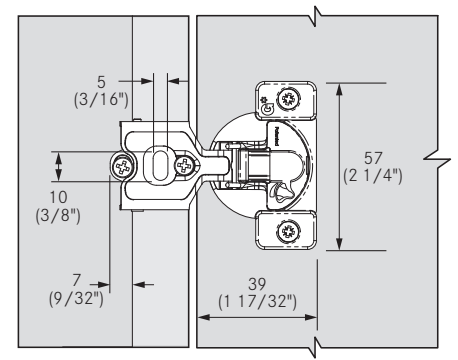
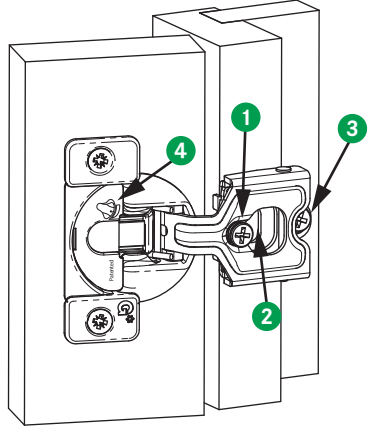
Door Thickness	16 (5/8")	17.5 (11/16")	19 (3/4")
Minimum Reveal	4.2 (5/32")	5.4 (7/32")	6.7 (1/4")

Based on door with square edge.

Arm and door clearances see page 10.

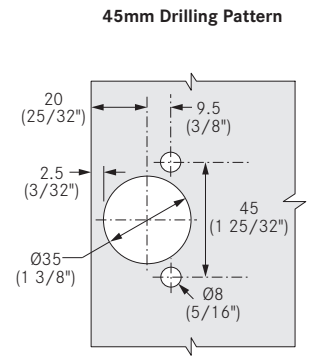
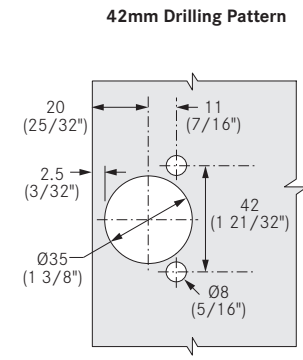
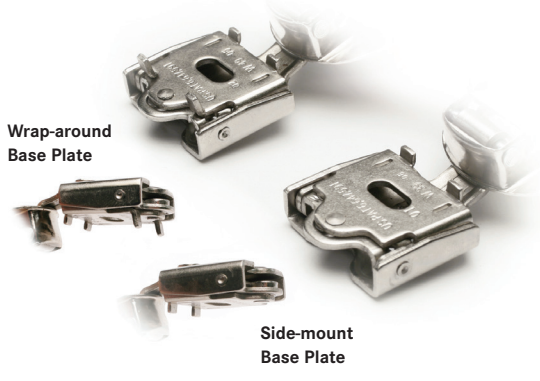
**Adjustments      Overall Dimensions**

- 1 Side Adjustment** +/-1.5mm (1/16")  
Rotate 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**



**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 - 1 1/4" to 1 1/2" 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 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 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-around - 45mm Drilling Pattern

Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			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



## Side-mount - 42mm Drilling Pattern

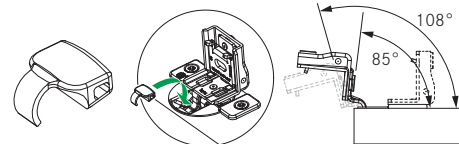
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 SM A-SC	02838A-15	300



## Angle Reduction Clip

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

Reduces opening angle to 85°



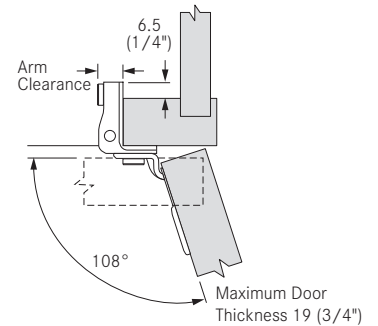
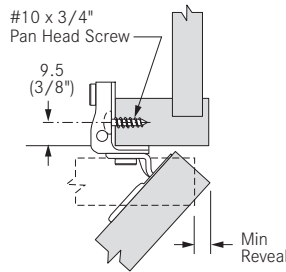
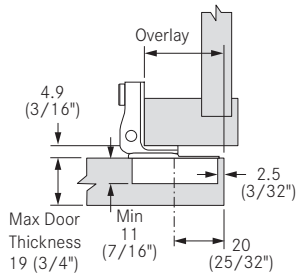
See page 27 for installation instructions.

## Wrap-around - 42mm Drilling Pattern

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 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

**Dimensions - Door Closed      Minimum Reveal      Clearances - Door Open**



**TEC 864 Minimum Reveal**

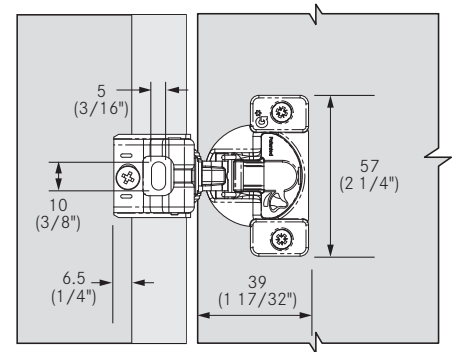
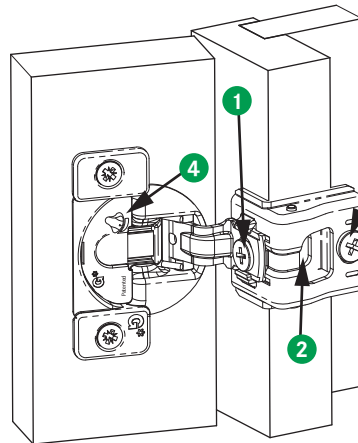
Door Thickness	16 (5/8")	17.5 (11/16")	19 (3/4")
Minimum Reveal	4.2 (5/32")	5.4 (7/32")	6.7 (1/4")

Based on door with square edge.

Arm and door clearances see page 12.

**Adjustments      Overall Dimensions**

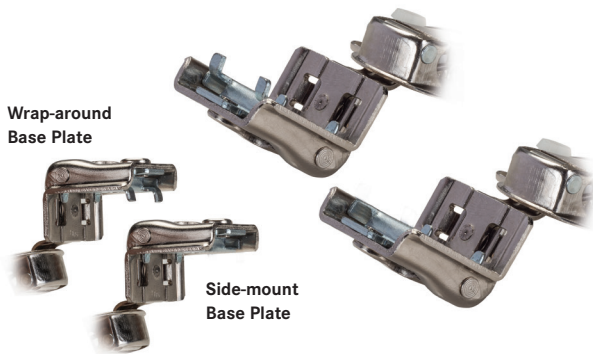
- 1 Side Adjustment** +/-1.5mm (1/16")  
Rotate cam adjustment screw.
- 2 Height Adjustment** +/-2mm (3/32")  
Loosen screw, align door, tighten screw.
- 3 Depth Adjustment** +3mm (1/8")  
Rotate cam screw.
- 4 Soft-close Tension**  
Light, Medium, and Strong setting  
See page 9 for complete adjustment explanation.



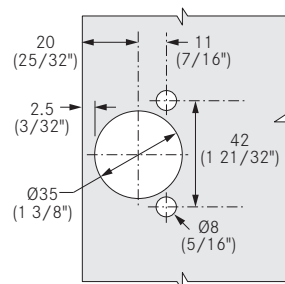
**Mounting Screws**

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

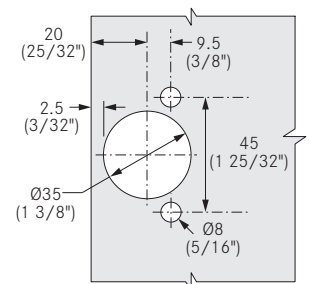
**Base Plates      Drilling Pattern**



**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 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
- Cam side adjustment
- Height adjustment at mounting screws
- For overlays 1 7/16" and greater
- 85° angle reduction clip available for Soft-close and Self-close
- Made in the USA



### Face-mount - 45mm Drilling Pattern Soft-close

Overlay mm (inch)	Door Clearance mm (inch)	Arm Clearance mm (inch)	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			Description	Item No.	PU	Description	Item No.	PU
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 A-SC	02295A-15	300



### Face-mount - 45mm Drilling Pattern Self-close

Overlay mm (inch)	Door Clearance mm (inch)	Arm Clearance mm (inch)	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			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



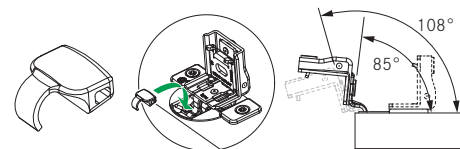
### Face-mount - 42mm Drilling Pattern Self-close

Overlay mm (inch)	Door Clearance mm (inch)	Arm Clearance mm (inch)	Dowelled Hinge Cup (VS8)		
			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

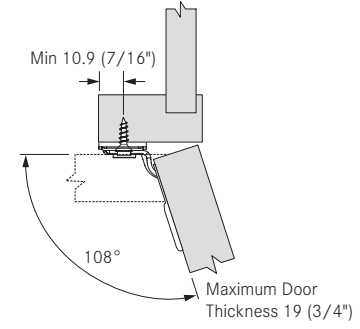
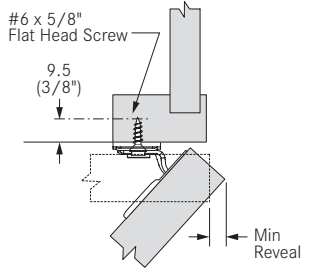
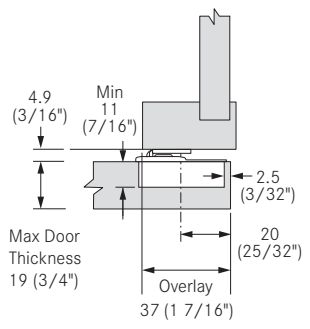
Reduces opening angle to 85°



See page 27 for installation instructions.

PU - Packaging unit

**Dimensions - Door Closed      Minimum Reveal      Clearances - Door Open**



**TEC 863 Minimum Reveal**

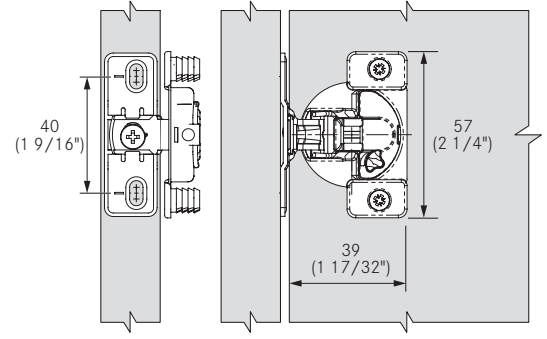
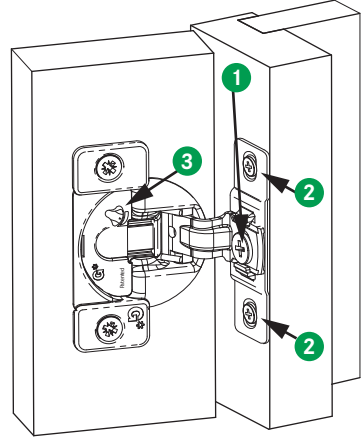
Door Thickness	16 (5/8")	17.5 (11/16")	19 (3/4")
Minimum Reveal	4.2 (5/32")	5.4 (7/32")	6.7 (1/4")

Based on door with square edge.

Arm and door clearances see page 14.

**Adjustments      Overall Dimensions**

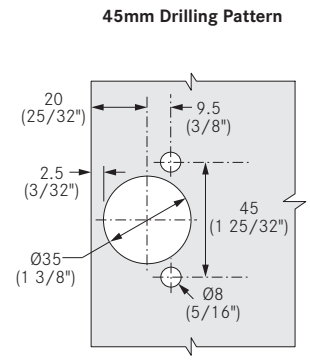
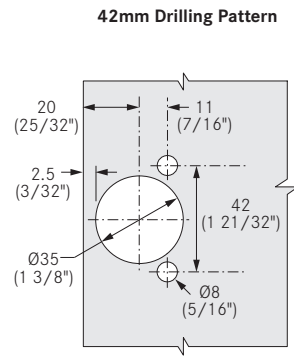
- 1 Side Adjustment** +/-1.5mm (1/16")  
Rotate cam adjustment screw.
- 2 Height Adjustment** +/-2mm (3/32")  
Loosen screws, align door, tighten screws.
- 3 Soft-close Tension**  
Light, Medium, and Strong setting  
See page 9 for complete adjustment explanation.



**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**



**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
- Side adjustment
- Cam depth adjustment
- Height adjustment at mounting screw
- Works with current Grass insertion machinery
- Made in the USA



## Side-mount - 45 mm Drilling Pattern

Overlay mm (inch)	Door Clearance mm (inch)	Arm Clearance mm (inch)	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			Description	Item No.	PU	Description	Item No.	PU
6 (1/4")	11 (7/16")	14.5 (9/16")	-	-	-	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-VS-45U 1 SM	04395-15	300

## Wrap-around - 45 mm Drilling Pattern

Overlay mm (inch)	Door Clearance mm (inch)	Arm Clearance mm (inch)	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			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 mm (inch)	Door Clearance mm (inch)	Arm Clearance mm (inch)	Dowelled Hinge Cup (VS8)		
			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

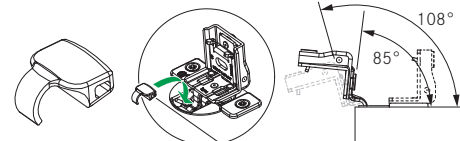
## Wrap-around - 42 mm Drilling Pattern

Overlay mm (inch)	Door Clearance mm (inch)	Arm Clearance mm (inch)	Dowelled Hinge Cup (VS8)		
			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°

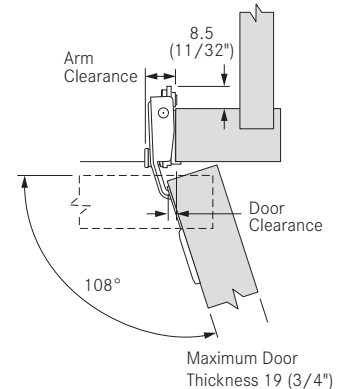
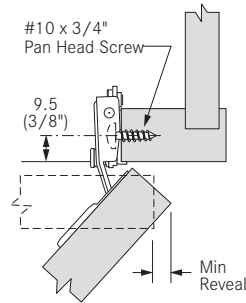
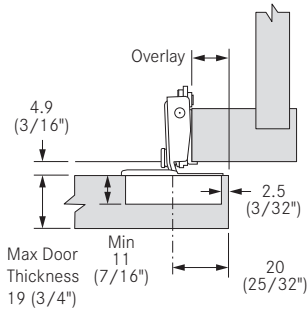


See page 27 for installation instructions.

PU - Packaging unit



**Dimensions - Door Closed      Minimum Reveal      Clearances - Door Open**



**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.

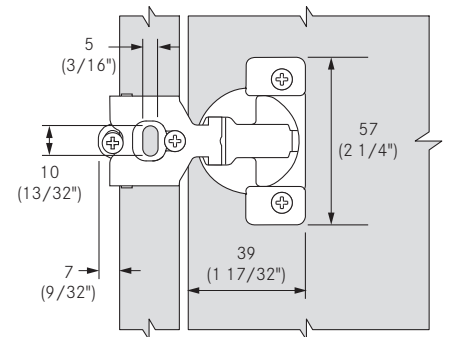
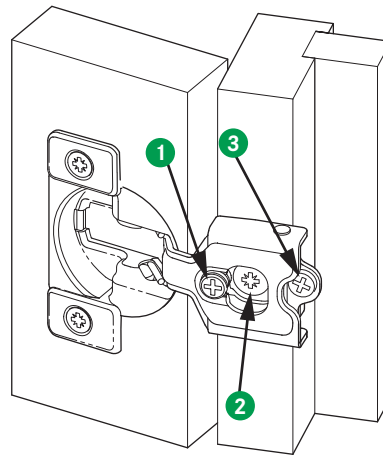
Arm and door clearances see page 16.

**Adjustments      Overall Dimensions**

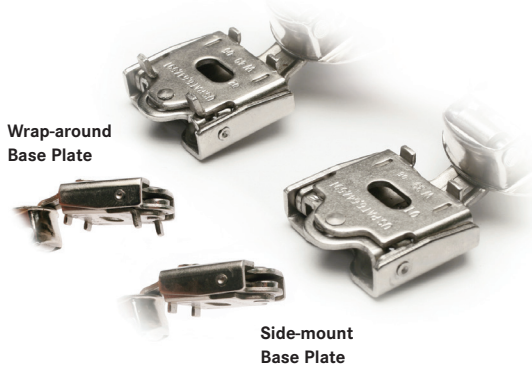
- 1 Side Adjustment** +/-1.5mm (1/16")  
Rotate adjustment screw.
- 2 Height Adjustment** +/-2mm (3/32")  
Loosen screw, align door, tighten screw.
- 3 Depth Adjustment** +2.5mm (3/32"), -5mm (1/32")  
Rotate cam screw.

**Mounting Screws**

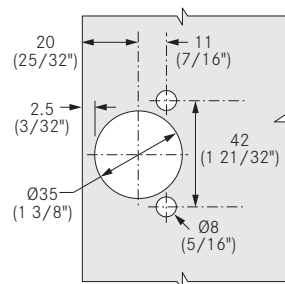
Hinge cup to door, #6 x 5/8" Flat head screw  
Base plate to face frame, #10 x 3/4" Pan head screw



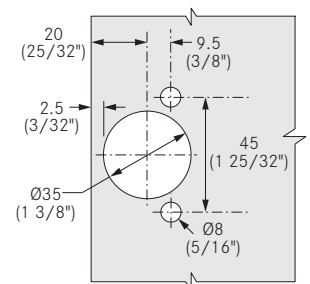
**Base Plates      Drilling Pattern**



**42mm Drilling Pattern**



**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 - 1 1/4" to 1 1/2" 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 - 45mm Drilling Pattern

Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			Description	Item No.	PU	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 SM	02894-15	300	TEC 864-VS-45U 1 1/4 SM	04466-15	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	TEC 864-VS-45U 1 3/8 SM	04468-15	300
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-45U 1 1/2 SM	02903-15	300	TEC 864-VS-45U 1 1/2 SM	04469-15	300



## Wrap-around - 45mm Drilling Pattern

Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)		
			Description	Item No.	PU	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 WM	02887-15	300	TEC 864-VS-45U 1 1/4 WM	04493-15	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	TEC 864-VS-45U 1 3/8 WM	04498-15	300
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-45U 1 1/2 WM	02901-15	300	TEC 864-VS-45U 1 1/2 WM	04499-15	300



## Side-mount - 42mm Drilling Pattern

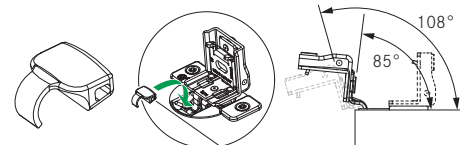
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)		
			Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 SM	02889-15	300
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-42U 1 3/8 SM	02897-15	300



## Angle Reduction Clip

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

Reduces opening angle to 85°



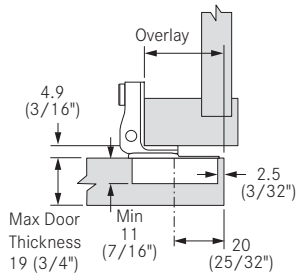
See page 27 for installation instructions.

## Wrap-around - 42mm Drilling Pattern

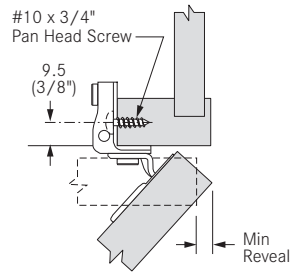
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)		
			Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 WM	02886-15	300

PU - Packaging unit

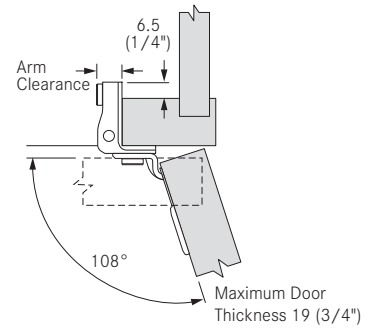
Dimensions - Door Closed



Minimum Reveal



Clearances - Door Open



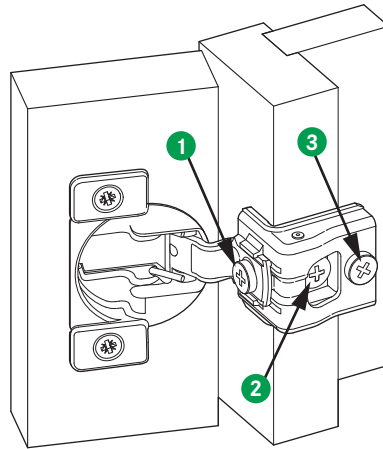
Adjustments

- 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

Overall Dimensions



Base Plates



Drilling Pattern

# 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	Dowelled 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

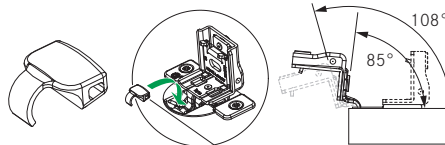
1.5 (1/16")  
Spacer



### Angle Reduction Clip

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

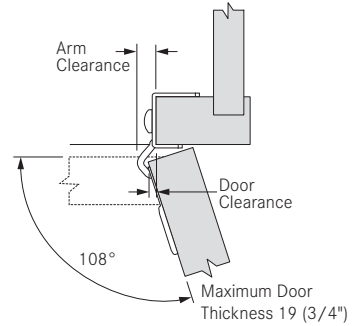
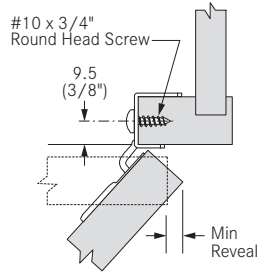
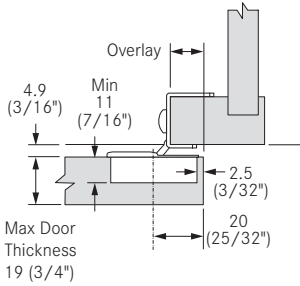
Reduces opening angle to 85°



See page 27 for installation instructions.

PU - Packaging unit

**Dimensions - Door Closed      Minimum Reveal      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.

**Adjustments      Overall Dimensions**

**1 Side Adjustment**

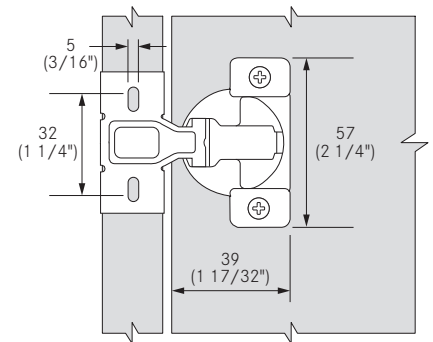
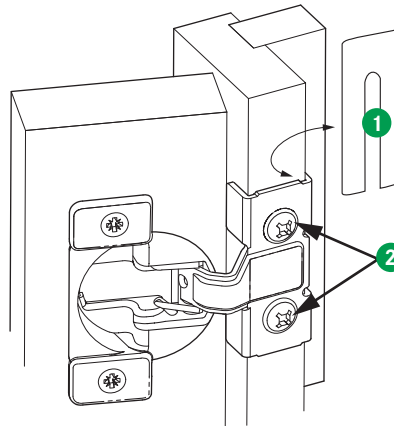
Decreasing overlay achieved with use of 1.5mm (1/16") spacer

**2 Height Adjustment +/-2mm (3/32")**

Loosen screws, align door, tighten screws.

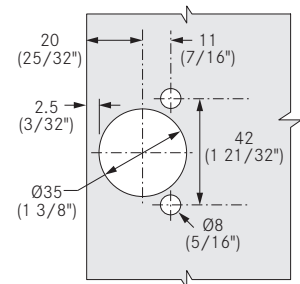
**Mounting Screws**

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



**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.

## Soft-close for doors



- Works with face frame cabinets on all door overlays
- Works with frameless cabinets on full overlay doors
- Brushed nickel 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

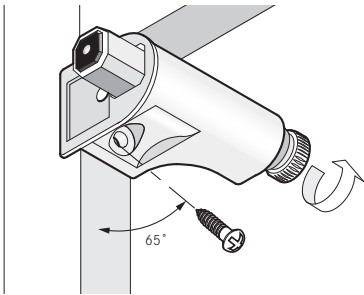
### UniSoft Adapter



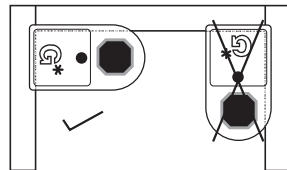
Description	Material	Item No.	PU
UniSoft, Polybag	Plastic, nickel	18971-37	1
UniSoft, Polybag Bulk	Plastic, nickel	18971-40	25
UniSoft, Bulk	Plastic, nickel	18971-14	250

Includes #6 x 3/4 Pan head screw

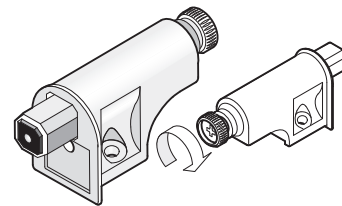
### Installation Mounting Position Adjustment



Use a 65° angle for best base results. Pilot drill 2.3mm (Ø3/32") and 1/4" deep for a #6 x 3/4" Pan head screw recommended. Mount in upper corner on hinge side.

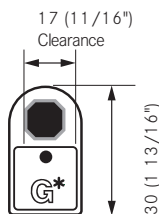
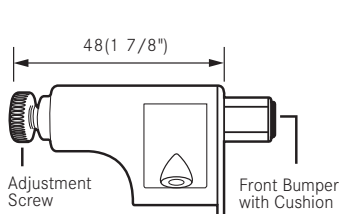


**IMPORTANT** The installation of our cabinetry hardware must comply with the Grass instructions that are stated on this catalog page.



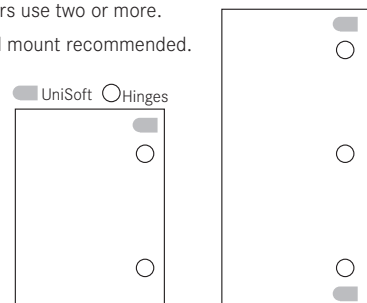
Turn adjustment screw to move damper in and out. Adjust in for heavier doors or out for light doors. Use Phillips or Pozidrive screwdriver or adjust manually.

### Dimensions UniSoft per Door



Use one UniSoft for most applications. For heavier doors use two or more. Trial mount recommended.

UniSoft Hinges



PU - Packaging unit

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

### Grass PRO1 for Hinge Drilling



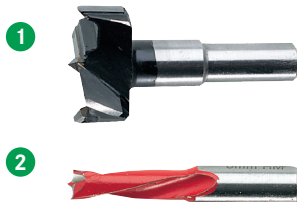
- Depth stop can be adjusted to material thickness
- Functional design
- Easy, fast, and efficient operation
- Easy maintenance
- 45mm boring pattern

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

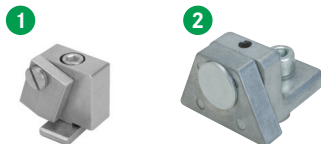


Description	Direction	Item No.	PU
1 35mm bit	RH	00077-01	1
2 8mm bit	LH	00160-01	1
American bit set for hinge drilling		00213-01	1

#### Set consists of:

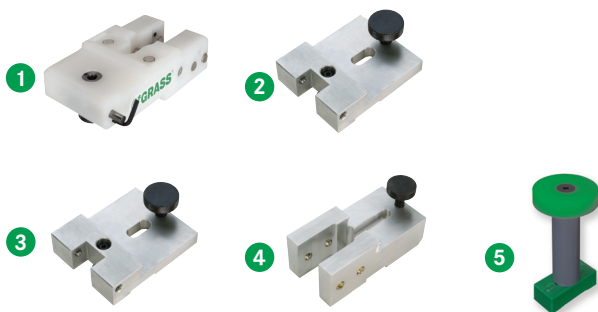
- 1 - 35mm bit, RH
- 2 - 8mm bit, LH

### Fence Stops



Description	Item No.	PU
1 Additional fence stop	949.200.21.0000	1
2 Additional fence stop, large	949.200.21.0100	1

### Insertion Dies



Description	Item No.	PU
1 Tiomos universal insertion die 110°/120°/160°	80039	1
2 TEC insertion die	92617	1
3 Nexis insertion die 110°/125°	04216-01	1
4 Nexis insertion die 170°	04218-01	1
5 TEC hand insertion tool	03987-01	1

PU - Packaging unit

# Accessories and Assembly Aids

TEC

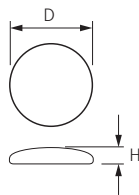
## Shelf Supports



Description	Item No.	PU
1 Plastic, clear, with steel pin	499.582.50.0050	5000
2 Shelf support 7006/9.5, nickel	<b>F069073460</b> 253	2500
3 H-802 plastic, square, clear	00036-43	500

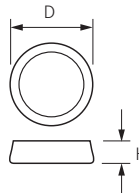
## Bumper Pads

### Bumper Pads, Self-adhesive



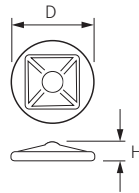
Description	Height	Diameter	Item No.	PU
Bumper pad, clear	2.5mm	10mm	63407-99	288
Bumper pad, clear	2.5mm	10mm	63407-47	7200

### AirSoft Bumper Pads, Self-adhesive



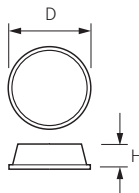
Description	Height	Diameter	Item No.	PU
AirSoft bumper pad, clear	5mm	12.7mm	63481-43	500
AirSoft bumper pad, clear	5mm	12.7mm	63483-30	5000

### Bumper Pads, Self-adhesive



Description	Height	Diameter	Item No.	PU
Bumper pad, clear	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

PU - Packaging unit



## TEC

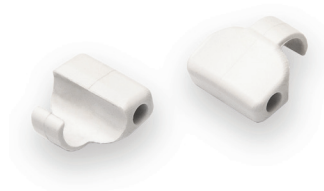
### Cover Caps



Hole covers for 35mm cup drillings

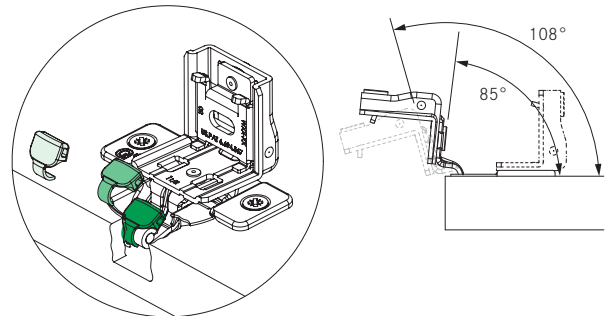
Description	Item No.	PU
35mm cover cap, white	22227-42	100

### Angle Reduction Clip

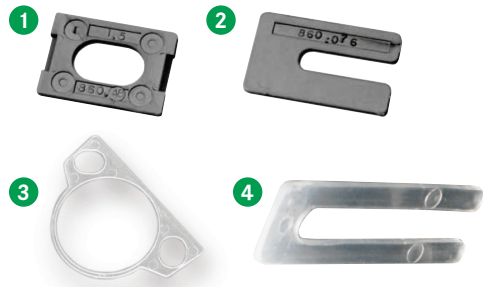


Reduces opening angle to 85°

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



### Spacers



Description	Item No.	PU
1 860-048 1.5mm (1/16") thick, without locating pins	00264-42	100
2 860-076 1.5mm (1/16") thick, slotted 00047-42 100	00047-42	100
3 1.5mm (1/16") thick, hinge cup spacer	00284-42	100
4 1.5mm (1/16") thick, slotted for MDF, clear	00209-42	100

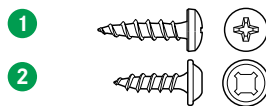
### Screws

#### 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
1 #10 x 3/4" PHP	81007-43	500
2 #8 x 5/8" Quad round	81017-43	500







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