

Durulite® RetailerTM Hardware Manual

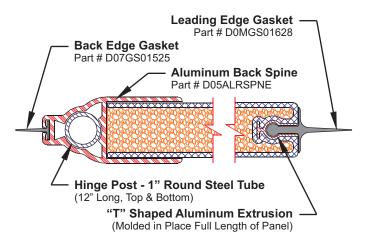


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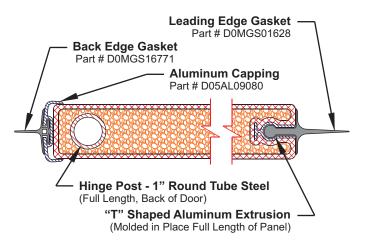
DURULITE RETAILER DOOR



Section "A-A"



Retailer "Cut to Size" (Top, Back & Hinge Areas Cut to Fit Opening)



Section "B-B"



Retailer "Monolithic"
(One Piece Panel Molded to Standard Sizes)

UPPER HINGE COMPONENTS

ROLLER BEARING ASSEMBLY



Retailer Roller Assembly Part # D05AS5508C

Retailer Doors are equipped with a Roller Bearing Assembly which consists of a stainless steel or black oxide coated steel bearing roller fastened to a solid cast aluminum housing. The Roller Assembly is mounted above the V-Cam (See Below) and fastened to the upper hinge post. A roll pin is inserted completely through the aluminum housing and hinge post to prevent the door from slipping when in operation.

The Roller Assembly supports the weight of the door and secures the door at the proper height. When the door opens, the roller rides up the path on the v-cam up to a height of 1 3/8" at the fully open position. When the door is released at that point, gravity causes the roller to descend to the lowest position on the v-cam, thus closing the door and holding it in the closed position.

V-CAMS



90° X 90° V-Cam Assembly Part # D05ASUHGNM

The design of the V-Cam provides a path for the roller bearing and a "V" which holds the roller bearing and door stationary while in the closed position. Retailer V-Cams are made from an engineered composite material which is extremely durable. Although the door and roller assembly only rise 1-3/8", Chase Doors requires an **Absolute Minimum 2" Gap** between the top of the door and the jamb header when the door/doors are in the closed position.

The 90° x 90° V-Cam has a total swing of over 100° in each direction. At full swing the door will rise 1-3/8" from the closed position. This V-Cam is pre-mounted to a stainless steel corner plate for ease of installation and mounting of the hinge seal.



180° X 90° "LEFT" V-Cam Assembly Part # D05AS180LC



180° X 90° "RIGHT" V-Cam Assembly
Part # D05AS180RC

The 180° x 90° (270°) V-Cam has a total swing of over 100° in one direction and 180° in the other direction . At full swing the door will rise $1\text{-}3/8^{\circ}$ from the closed position on the 90° side and 2° on the 180° side.

NOTE: The 180° must never be mounting inside of the opening jamb, door and property damage will result!

There are two separate V-Cams for the 180° x 90° applications, one for each side of the opening. There is a Left (Part # D05AS180LC) and a Right (Part # D05AS180RC) for each double door opening and either one may be used for a single door as indicated on order, see images to the left. Always be sure that the 180° side has plenty of clearance to swing completely open.

LOWER HINGE COMPONENTS

STANDARD 90° LOWER HINGE GUARD



Retailer 90° Cast Aluminum Lower Hinge Guard Part # D05ASHGRTC

The Standard 90° Lower Hinge Guard is available in cast aluminum or stainless steel with a UHMW bushing inserted at the pivot point.

This lower hinge assembly holds the lower hinge post in position, preventing horizontal movement of the door. The assembly also protects the lower hinge post from impact damage.

The pivot point on the lower hinge guard and the v-cam must be in line with one another for proper operation of your door/doors.

The base plate has two pre-drilled holes for the installation of 3/8" floor anchors.

A double bladed gasket is mounted to the door and provides a seal between the hinge assembly and the door.

A Minimum 3-1/2 jamb is required for mounting the Retailer lower hinge assembly.



Retailer 90° Stainless Steel Lower Hinge Guard Part # D05AS9090C

180° X 90° LOWER HINGE GUARD



Retailer 180° Lower Hinge Guard
Part # D05AL18LHC

The 180° X 90° (270°) Lower Hinge Guard is also a one-piece cast aluminum part with a UHMW bushing inserted at the pivot point.

This hinge assembly has the same basic functions as the 90° lower hinge assembly. The 180° X 90° hinge guard mounts on the corner of the jamb and allows for the door swing of 90° toward the inside of the jamb and 180° toward the outside of the jamb.

The 180° X 90° lower hinge guard is made to fit either side in a double opening.

The pivot point on the lower hinge guard and the v-cam must be in line with one another for proper operation of your door/doors.

The base plate has three pre-drilled holes for the installation of 3/8" floor anchors.

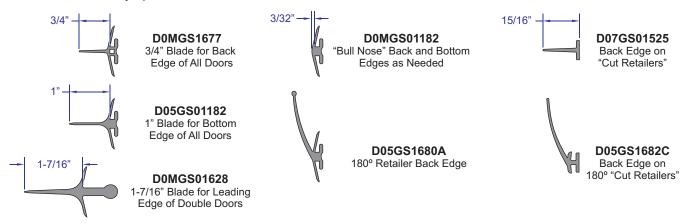
A double bladed gasket is mounted to the door and provides a seal between the hinge assembly and the door.

GASKETS and TOP SEALS

RETAILER GASKETS

The Retailer Door comes equipped with gaskets along the leading, bottom and back edges. The gasket on the leading edge is held in place by a "Molded In" aluminum extruded key-way. The bottom and back edges have an extruded aluminum cap with a key-way running down the center. The base of the gasket is inserted into this key-way and held in place by bending the legs of the key-way down which pinches the gasket.

By varying the leading edge gaskets, nominal door widths for double doors may be increased by up to 1" or reduced by up to 1-3/4". Nominal door widths for single doors may be increased by up to 1/8" or reduced by up to 3/4".

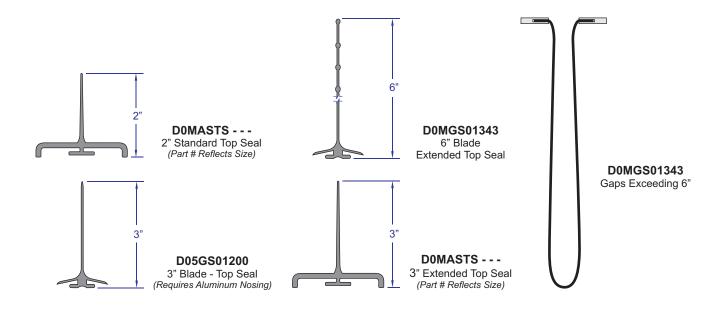


RETAILER TOP SEALS

To function properly the Retailer traffic door requires a minimum of 2" between the top of the door and the frame header while in the closed position. The Top Seals along with the upper hinge seals provide a seal for this gap.

When the gap between the top of the door and the frame header is over 2" and up to 6", an extruded top seal is mounted to the header. The tip of the blade rests on the top edge of the door.

If the gap is greater than 6", a fabricated extended top seal is required. This top seal is made of black flexible reinforced nylon. Each end of the flexible nylon is pressed into a black aluminum mounting strip. The fasteners are inserted through these aluminum strips and into the header.

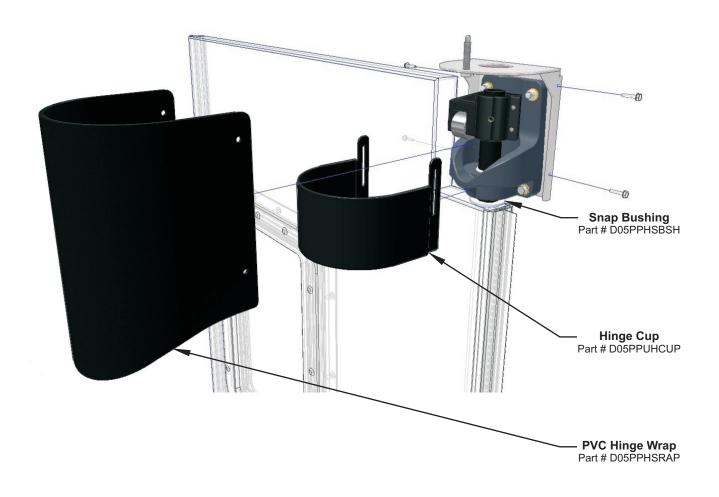


UPPER HINGE SEAL

RETAILER UPPER HINGE SEAL

The "New" Retailer Upper Hinge Seal consists of three main components: 1 Snap Bushing, 1 Hinge Cup and 1 Hinge Wrap. The snap bushing is pressed fit onto the base of the upper hinge post. The bushings main function is to pull the hinge cup down as the door lowers to the closed position. The hinge cup snaps onto the bushing under a flange. The hinge cup holds the shape of the wrap so that it seals the hinge area at the door. The main purpose of the hinge seal is to provide a seal between the jamb, header and hinge area of the door. In addition to providing a seal, the upper hinge seal provides a finished appearance to the door.

The flexible PVC Hinge Wrap is mounted to the stainless steel mounting plate with #10 X ½" Tek Screws.



WINDOWS (Standard & ADA)

STANDARD RETAILER WINDOWS



Standard Retailer Window Single Pane

Retailer windows are available in single pane or double pane.

The single pane window assembly consists of two ABS frames, one sheet of polycarbonate, a cap separator strip and fasteners. The cap separator strip is placed between one of the frames and the polycarbonate sheet, then the second frame is installed on the opposite side. The second frame presses the polycarbonate against the cap separator strip and holds the polycarbonate firmly in place.

The double pane window assembly consists of two ABS frames, two sheets of polycarbonate, a cap separator strip and fasteners. In the double pane configuration, the cap separator strip sits in between the two sheets of polycarbonate. It separates the polycarbonate and holds the polycarbonate tightly against the frames.

Below is a list of "Standard Window Sizes" and the corresponding door size.



Standard Retailer Window Double Pane

PANEL SIZE	STANDARD WINDOW SIZE
24" & 27"	12" x 18"
30"	12" x 18"
32"	. 12" x 18" & 16" x 16"
34"	. 12" x 18" & 16" x 16"
36" 12" 8 18"	12" v 18" 16" v 16" & 17" v 23"

ADA APPROVED RETAILER WINDOWS



ADA Window Frame 20" X 30" Shown

ADA Requires that the lowest portion of the vision area on a window not exceed 40" from the Finished Floor. Retailer Standard Windows do not meet this requirement. Therefore we have developed several window sizes and locations that satisfy both ADA and OSHA requirements.

ADA Windows are available in single pane only.

Below is a list of "ADA Window Sizes" and the corresponding door size.

PANEL SIZE	STANDARD WINDOW SIZE
24" & 27"	12" x 30"
30"	12" x 30" & 16" x 30"
32" & 34"	12" x 30", 16" x 30" & 20" x 30"
36", 42" & 48"	12" x 30", 16" x 30", 20" x 30" & 24" x 30"

BUMPERS & KICK-PLATES

POLYETHYLENE SPRING BUMPERS

Polyethylene Spring Bumpers Isometric View Snap Bushing Part # D05PPHSBSH

Polyethylene Spring Bumpers Top Exploded Assembly View

Retailer doors are available with standard polyethylene spring bumpers. Standard bumpers have a 3" Curl at the leading edge.

To mount the bumpers, a threaded steel insert in pressed into the door panel. A 1" washer and a 1/4-20 bolt are used to fasten the bumper to the insert. The procedure is duplicated on the opposite side of the panel which pulls both bumpers tight to the face of the door panel.

Polyethylene bumpers are available in the same color choices as the doors.

Bumper Sizes

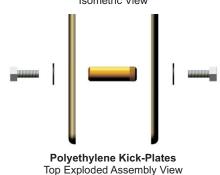
Bumper Height X Door Width

Nominal 6" x 24" 6" x 27" 6" x 30" 6" x 32" 6" x 34" 6" x 36"	Actual 7-3/4" x 18-1/4" 7-3/4" x 18-1/4" 7-3/4" x 21-1/4" 7-3/4" x 24-1/4" 7-3/4" x 26-1/4" 7-3/4" x 27-1/4"	Nominal 18" x 24" 18" x 27" 18" x 30" 18" x 32" 18" x 34" 18" x 36"	Actual 18-5/8" x 18-1/4" 18-5/8" x 18-1/4" 18-5/8" x 21-1/4" 18-5/8" x 24-1/4" 18-5/8" x 27-1/4"	Nominal 36" x 24" 36" x 27" 36" x 30" 36" x 32" 36" x 34" 36" x 36"	Actual 7-3/4" x 18-1/4" 7-3/4" x 18-1/4" 7-3/4" x 21-1/4" 7-3/4" x 24-1/4" 7-3/4" x 26-1/4" 7-3/4" x 27-1/4"
12" x 24"	13" x 18-1/4"	24" x 24"	24-3/8" x 18-1/4"	42" x 24"	13" x 18-1/4"
12" x 27"	13" x 18-1/4"	24" x 27"	24-3/8" x 18-1/4"	42" x 27"	13" x 18-1/4"
12" x 30"	13" x 21-1/4"	24" x 30"	24-3/8" x 21-1/4"	42" x 30"	13" x 21-1/4"
12" x 32"	13" x 24-1/4"	24" x 32"	24-3/8" x 24-1/4"	42" x 32"	13" x 24-1/4"
12" x 34"	13" x 26-1/4"	24" x 34"	24-3/8" x 26-1/4"	42" x 34"	13" x 26-1/4"
12" x 36"	13" x 27-1/4"	24" x 36"	24-3/8" x 27-1/4"	42" x 36"	13" x 27-1/4"

KICK-PLATES (Impact Plates)



Polvethylene Kick-Plates Isometric View



Retailer Kick-Plates (often referred to as Impact Plates) are available in Polyethylene or Stainless Steel. Polyethylene Kick-Plates are 1/4" Thick and have a radius around the outside edges. The Stainless Steel kick-plates are made of 18 Gauge Stainless Steel with a #4 Brushed finish.

Both styles of kick-plate are installed in the same manner as a spring bumper. A threaded steel insert is pressed into the door panel. a 1" washer and a 1/4-20 bolt are used to fasten the kick-plate to the insert. The procedure is duplicated on the opposite side of the panel which pulls both kick-plates tight to the face of the door panel.

Polyethylene kick-plates are available in the same color choices as the doors.

Kick-Plate Sizes

Kick-Plate Height X Door Width

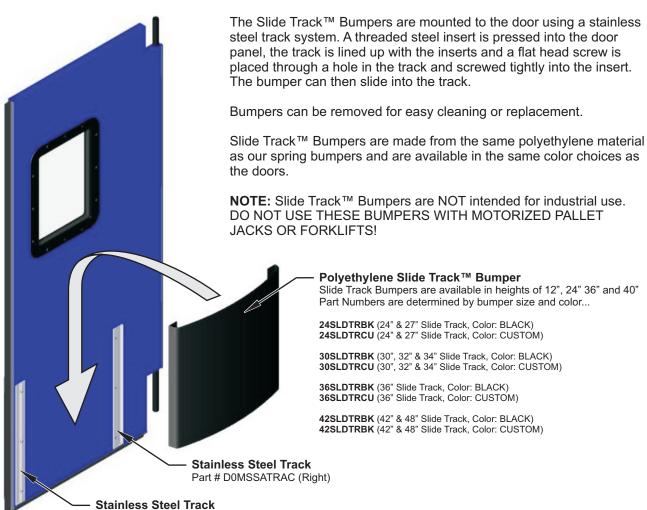
Nominal 6" x 24" 6" x 27" 6" x 30" 6" x 32" 6" x 34" 6" x 36"	Actual 8-3/4" x 16-3/4" 8-3/4" x 18-3/4" 8-3/4" x 23-1/4" 8-3/4" x 25-1/4" 8-3/4" x 25-1/4"	Nominal 18" x 24" 18" x 27" 18" x 30" 18" x 32" 18" x 34" 18" x 36"	Actual 22-1/4" x 16-3/4" 22-1/4" x 18-3/4" 22-1/4" x 23-1/4" 22-1/4" x 25-1/4" 22-1/4" x 29-3/4"	Nominal 36" x 24" 36" x 27" 36" x 30" 36" x 32" 36" x 34" 36" x 36"	Actual 35-3/4" x 16-3/4" 35-3/4" x 18-3/4" 35-3/4" x 23-1/4" 35-3/4" x 25-1/4" 35-3/4" x 25-1/4" 35-3/4" x 29-3/4"
12" x 24"	15-1/2" x 16-3/4"	24" x 24"	29" x 16-3/4"	42" x 24"	42-1/2" x 16-3/4"
12" x 27"	15-1/2" x 18-3/4"	24" x 27"	29" x 18-3/4"	42" x 27"	42-1/2" x 18-3/4"
12" x 30"	15-1/2" x 23-1/4"	24" x 30"	29" x 23-1/4"	42" x 30"	42-1/2" x 23-1/4"
12" x 32"	15-1/2" x 25-1/4"	24" x 32"	29" x 25-1/4"	42" x 32"	42-1/2" x 25-1/4"
12" x 34"	15-1/2" x 25-1/4"	24" x 34"	29" x 25-1/4"	42" x 34"	42-1/2" x 25-1/4"
12" x 36"	15-1/2" x 29-3/4"	24" x 36"	29" x 29-3/4"	42" x 36"	42-1/2" x 29-3/4"

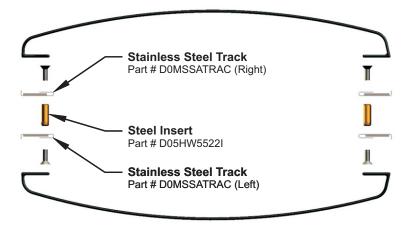
SLIDE TRACK™ BUMPERS

POLYETHYLENE SLIDE TRACK BUMPERS

Part # D0MSSATRAC (Left)

Retailer doors may be equipped with a Slide Track™ Bumper.



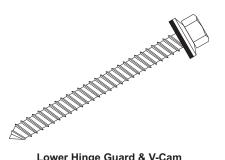


Polyethylene Slide Track™ Bumper Top Exploded Assembly View

RETAILER FASTENERS

STANDARD RETAILER FASTENERS

Retailer doors ship from the factory with fasteners for the type of frame construction indicated on the original sales order.



Lower Hinge Guard & V-Cam (Wood Frame)

1/4" x 3" SS Hex Head Screw w/ 1/4" SS Washer & Neoprene Gasket

Pilot Hole: Use 3/16" Drill Bit

Lower Hinge Guard & V-Cam



Lower Hinge Guard & V-Cam (Steel Frame)

1/4"-14 X 1 3/4" Hex Washer Head Tek Screw w/ Galv. Plating

Pilot Hole: Use 1/8" Drill Bit for Steel up to 3/8" Thick Use 13/64" Drill Bit for Steel over 3/8" Thick



Upper Hinge Seal

Upper Hinge Seal

#10 X 1/2" Hex Washer Head Tek Screw

Pilot Hole: Use 5/64" On Steel 1/4" or Thicker



Top "Header" Seal

Top "Header" Seal

#14 X 1 1/2" Hex Washer Head Tek Screw

Pilot Hole: Use 5/32" Drill Bit



Lower Hinge Guard (to Floor)

3/8" Wedge Anchor for Floor

Pilot Hole: Use 3/8" Bit which is applicable for you flooring material

LIMITING POSTS

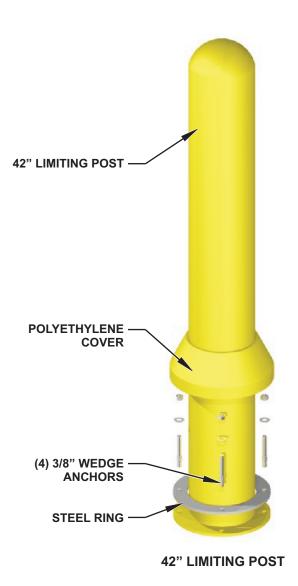
RETAILER LIMITING POSTS

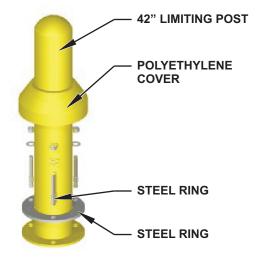
Roto-Molded Polyethylene Limiting Posts may be used as door stops for Retailer doors. The purpose of the limiting post is to limit the swing of the doors so they do not over-swing which can cause damage to property, the door or both. Limiting Posts are anchored to the floor in a location specified by Chase Doors.

The limiting posts come in two different sizes, a 42" High model which is 5-1/4" in Diameter and a 19" High Model which is approximately 3" in diameter. Each model has a polyethylene shell with a thickness of 3/16".

A flange is molded onto the base of the limiting post. A steel ring is placed over the flange. Then the limiting posts are anchored to the floor using (4) 3/8" Wedge anchors for the 42" Model and (3) 3/8" Wedge anchors for the 19" Model. A Polyethylene cap is placed over the post and then slid down to conceal and protect the mounting hardware.

Limiting Posts are available in the same color choices as the doors.





19" LIMITING POST

ASK FOR INFORMATION ON THESE OTHER QUALITY PRODUCTS FROM



TRAFFIC DOORS

- **→** Durulite[®] Insulated Impact Traffic Doors
 - Industrial
 - Standard
 - 200 Series (Postal/Security)
 - XLS270
 - XLD360
- → Chase Traffic Doors
 - SC3000
 - Café Doors
- **→** Chase Service Doors
 - ABS 5000
 - SD2000
 - SRP5000
 - SST2000
 - XLP5000
- **→** Proline[™] Impact Traffic Doors
 - 300i & 400i
 - 300s & 400s
 - 350i & 350s
 - 600-SEC (Postal/Security)
- **⇒** Saino Fire Doors
 - · 1000 & 2000
 - · 3000 & 4000
 - 50000

- **→** Saino Service Doors
 - 1100
 - 3100
 - 61000
 - 63000
 - 73000
- → Pharmaceutical Doors
 - DuruSlide® 67000F
 - DuruSlide® 67000D
 - DuruSlide® 67000K
- → Personnel Doors
 - Durulite CR1400
 - Chase FG1400
 - DuruSwing 9700K
- **→** Airgard® Flexible Doors
 - · 100, 200 & 300
 - 973
 - EconoClear
 - HS
 - Uni-Flex 240
- **⇒** Saino Operators
 - F1900 PLC 1900 PLC
 - TN
 - TXP

STRIP DOORS

- **→** Chase Doors offers the largest variety of vinyl strip products in the country.
 - Standard and USDA Approved Formulation
 - 4" to 48" Widths
 - Low-Temp Material
 - Loc-Rib for Exterior and Forklift Applicatioons
 - Color-View (Black, Blue)
 - Amber-Weld Material
 - Safety Orange Material
- **→** Mounting Options
 - "J-Hook" (Bi Mount)
 - EconoTrack (Hole Punch)
 - Wall Mount
 - In Jamb
 - Over Head Door Brackets
 - Gate Doors
 - Trolley Mounts
 - Truck and Trailer Brackets