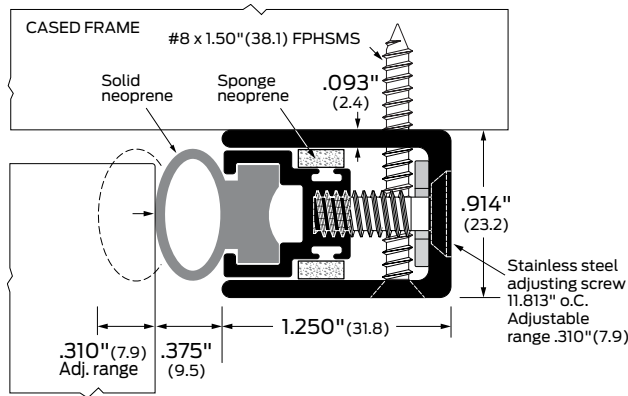


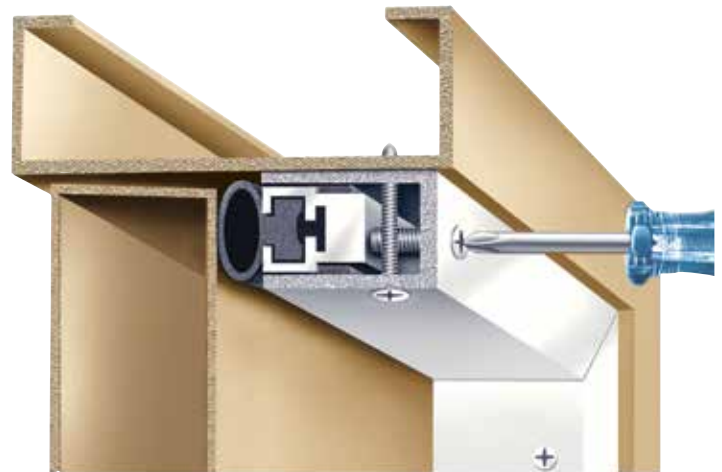
Adjustable sealing systems – jamb-applied

770



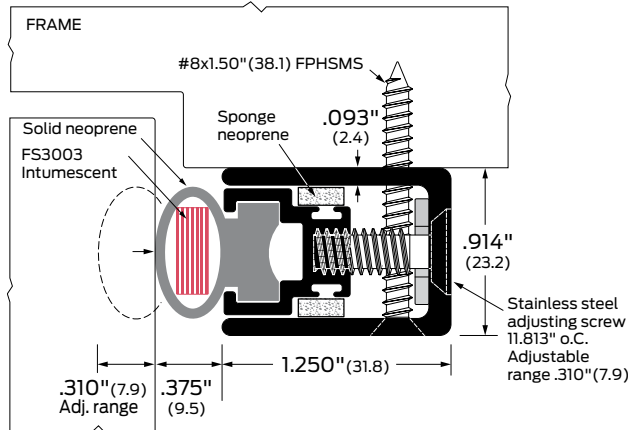
Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 770AA, 770BK, 770D, 770G R3B254
BHMA CERTIFIED

This model is supplied with mitered corners.
 20 min as a stop. 180 min when applied to stop.



770 used on cased opening frame with mitered corners, used as a stop.

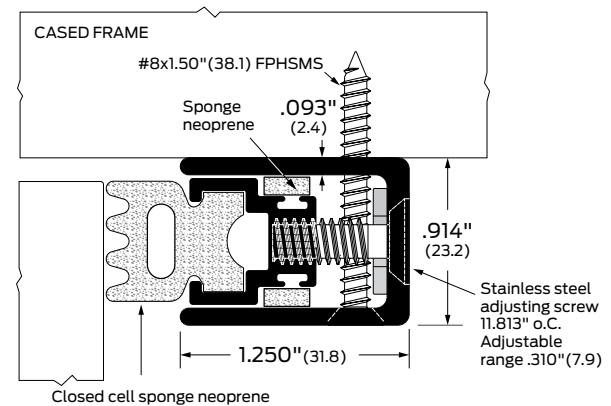
770FS



Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 770FS-AA, 770FS-BK, 770FS-D, 770FS-G R3R264
BHMA CERTIFIED

This model is supplied with mitered corners. 180 min. fire rating for metal doors when applied on a certified steel frame with no cased opening.

170



Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 170AA, 170BK, 170D, 170G R3C254
BHMA CERTIFIED

This model is supplied with mitered corners. 20 minutes as a stop. 180 min when applied to stop.

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

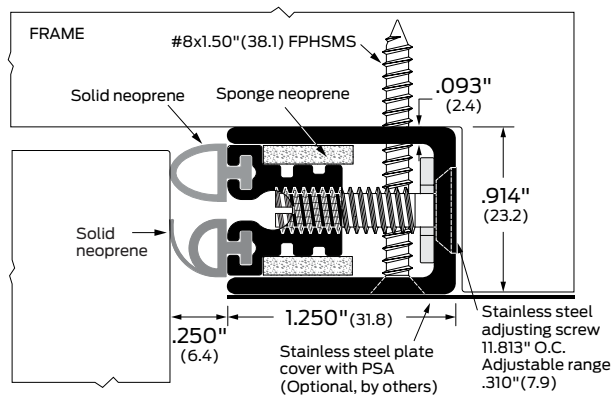
Verify frame manufacturer is approved to use applied stop.

Perimeter seals

Adjustable sealing systems – jamb-applied



7770

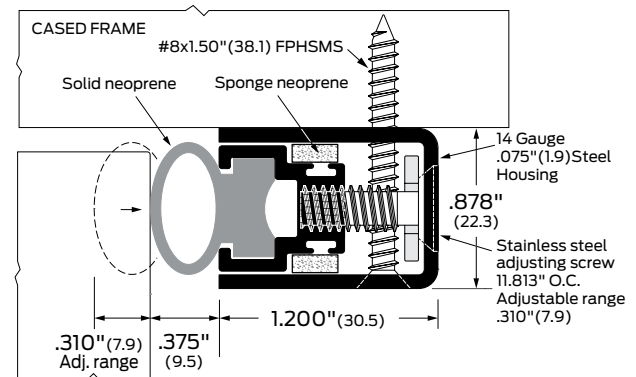


Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 7770AA, 7770BK, 7770D, 7770G R3B264



This model is supplied with mitered corners. Extruded Bulb/Finger for double-sealing protection. 20 minute as a stop, 180 min when applied to stop.

770SP / 770STST



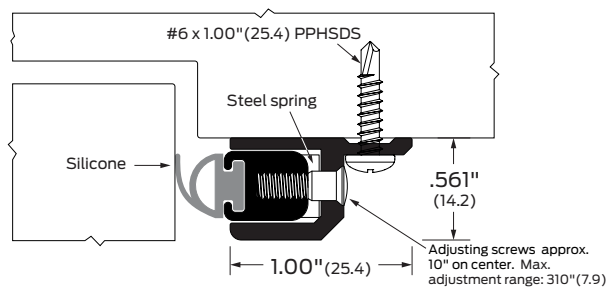
Options: S, SEC ANSI/BHMA: 770STST R0B264



This model is supplied with mitered corners. 90 min. fire rating for certified wood and metal doors and frames when applied as a stop.

Positive Pressure Listed as a stop for 16 gauge steel cased opening up to 90 minutes on single and pair doors. 180 minutes when applied to a stop.

712

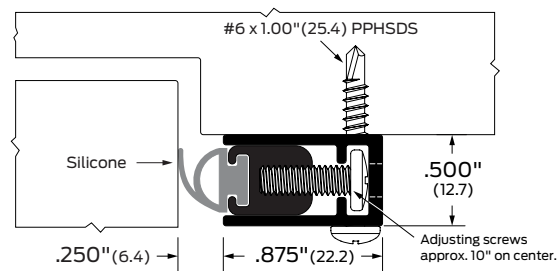


Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 712AA, 712BK, 712D, 712G R3E264

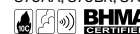


Adjustable and spring loaded. Extruded Bulb/Finger for double-sealing protection.

870

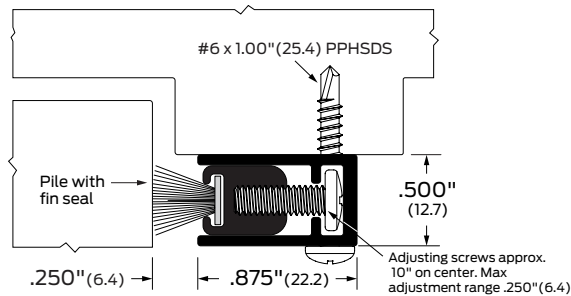


Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 870AA, 870BK, 870D, 870G R3E254



Extruded Bulb/Finger for double-sealing protection.

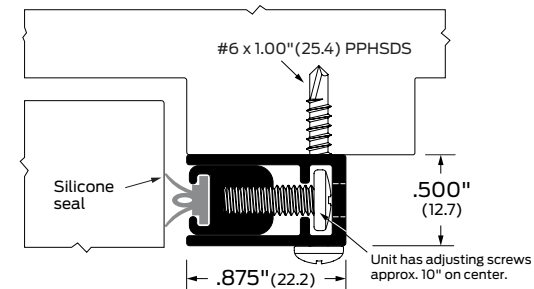
871



Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 871AA, 871BK, 871D, 871G R3F265



873



Finishes: AA, BK, D, G Options: SEC



See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

Finishes: SP = Steel Primed, STST=Stainless Steel.

Verify frame manufacturer is approved to use applied stop.

Head and jamb gasketing

Thresholds

Automatic door bottoms

Perimeter seals

Weatherstripping

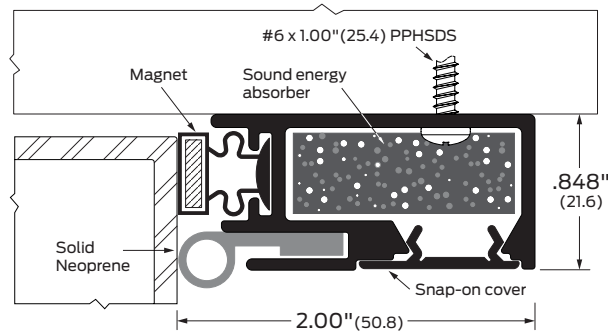
Intumescent

Sound control

Specialty applications

Appendix

3708

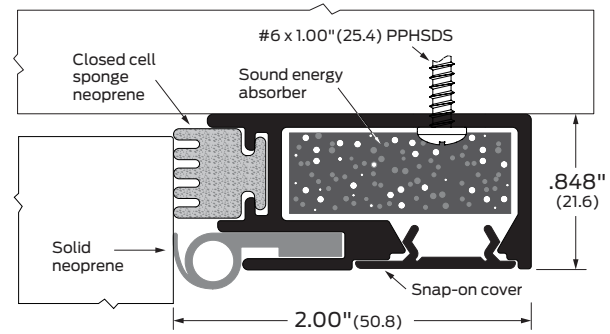


Finishes: ANSI/BHMA: AA, BK, 3708AA R3L154
D, G



Magnetic head & jamb gasketing. For use with metal interior doors only. Available to order as engineering special.

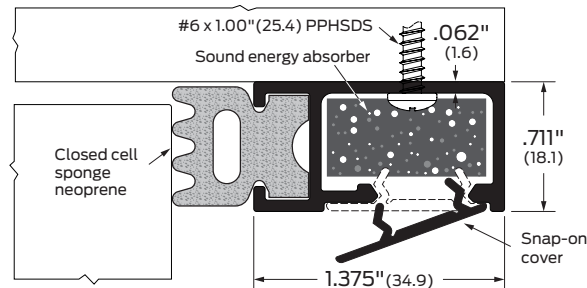
3709



Finishes: Options: AA, BK, S, SEC
D, G

Extruded Bulb/Finger for double-sealing protection.

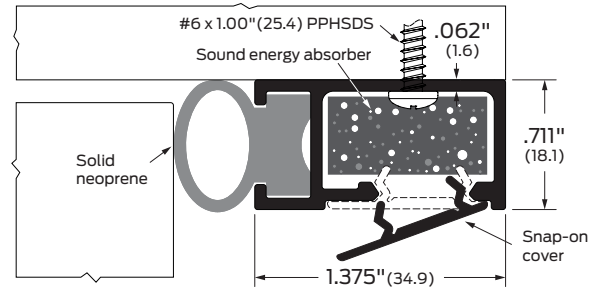
470



Finishes: Options: ANSI/BHMA: AA, BK, 470AA, 470BK, 470D, 470G R3C154
D, G



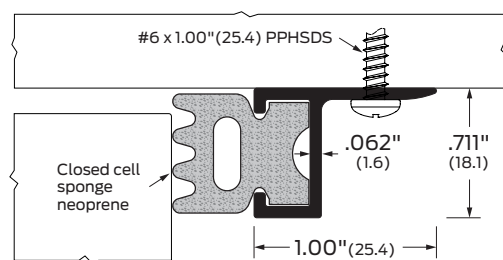
472



Finishes: Options: ANSI/BHMA: AA, BK, 472AA, 472BK, 472D, 472G R3B154
D, G



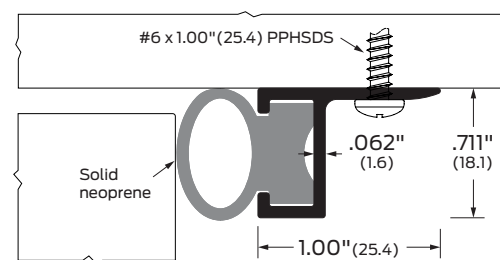
270



Finishes: Options: ANSI/BHMA: A, BK, 270A, 270BK, 270D, 270G R3C154
D, G



272



Finishes: Options: ANSI/BHMA: A, BK, 272A, 272BK, 272D, 272G R3B154
D, G



See Perimeter seals Accessories & options page for details.

Finishes:

- A Aluminum mill finish
- AA Aluminum clear anodized
- BK Aluminum black anodized
- D Aluminum dark bronze anodized
- G Aluminum gold anodized
- B Bronze, architectural mill finish
- B-ORB Oil-rubbed aged bronze

Options:

- FLO Air flow/ sound block
- PSA Pressure-sensitive adhesive
- ZAG Ligature resistant gasketing
- S Order as a set
- SEC Security screws

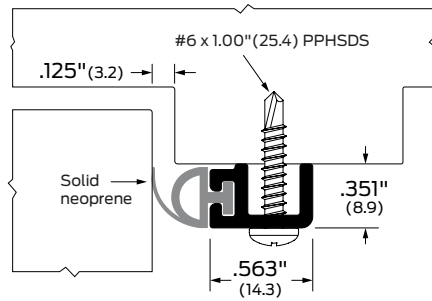
Note:

Perimeter seals

Head and jamb gasketing



485

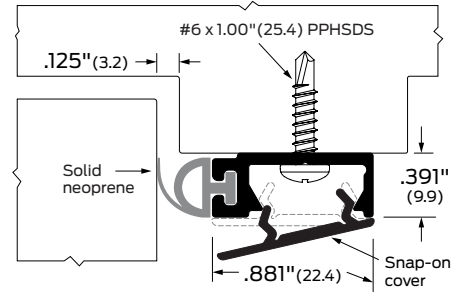


Finishes: AA, BK, D, G Options: ZAG, S, SEC ANSI/BHMA: 485AA, 485BK, 485D, 485G R3B164



ZAG option for mental health applications includes security screws. Extruded Bulb/Finger for double-sealing protection.

475

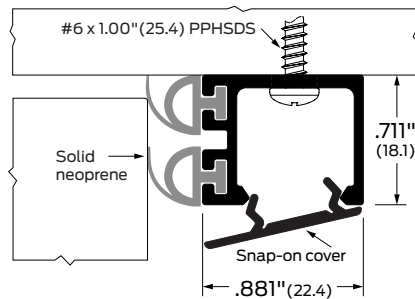


Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 475AA, 475BK, 475D, 475G R3B164



Extruded Bulb/Finger for double-sealing protection. Channel may be used for low-voltage wiring, subject to local building codes.

478

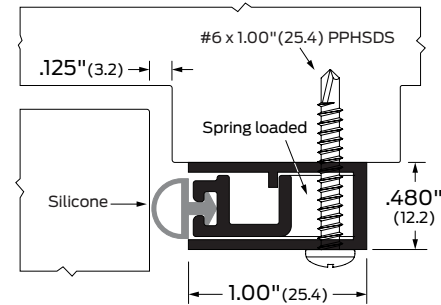


Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 478AA, 478BK, 478D, 478G R3B154



Extruded Bulb/Finger for double-sealing protection. Channel may be used for low-voltage wiring, subject to local building codes.

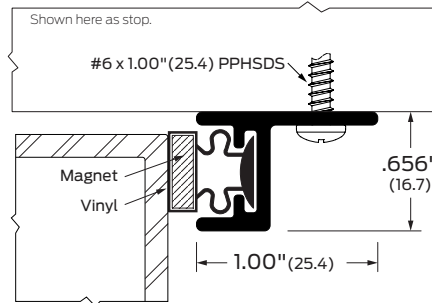
570



Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 570AA, 570BK, 570D, 570G R3E264



370

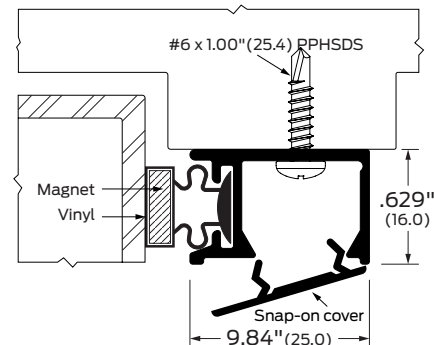


Finishes: A, BK, D, G ANSI/BHMA: 370A, 370BK, 370D, 370G R3L155



Magnetic head & jamb gasketing. For use with interior metal doors only. Available to order as engineering special.

375



Finishes: A, BK, D, G ANSI/BHMA: 375A, 375BK, 375D, 375G R3L155



Magnetic Head & Jamb Gasketing. For use with interior metal doors only. Available to order as engineering special.

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

Head and jamb gasketing

Thresholds

Automatic door bottoms

Perimeter seals

Weatherstripping

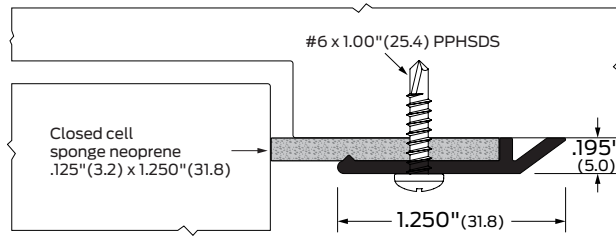
Intumescent

Sound control

Specialty applications

Appendix

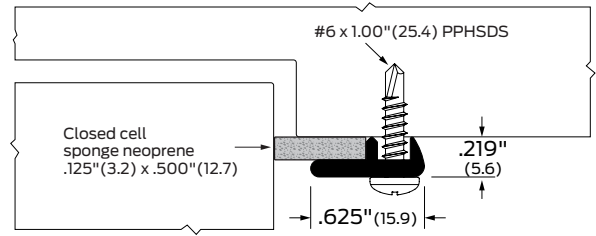
139



Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 139A, 139BK, 139D, 139G R3C164



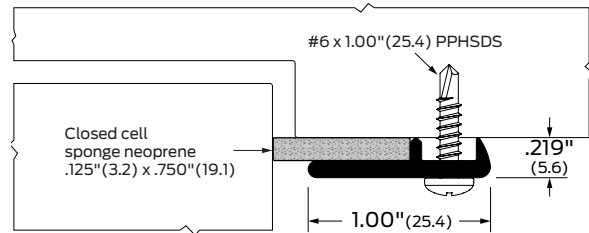
312



Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 312A, 312BK, 312D, 312G R3C164



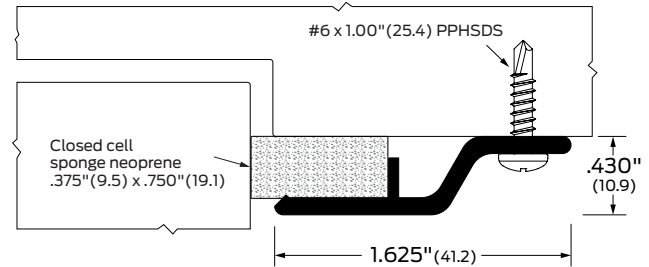
314



Finishes: AA, BK, D, G, B, B-ORB Options: S, SEC ANSI/BHMA: 314AA, 314BK, 314D, 314G R3C164



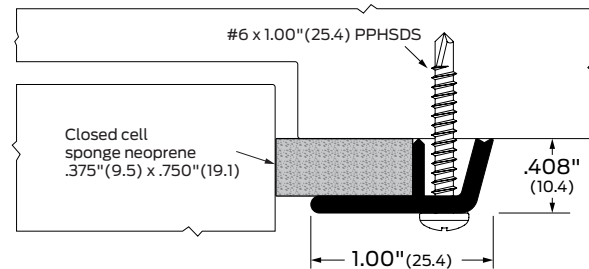
140



Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 140A, 140BK, 140D, 140G R3C164



318

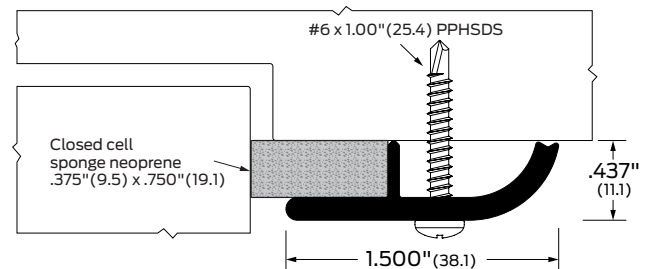


Finishes: AA, BK, D, G Options: ZAG, S, SEC ANSI/BHMA: 318AA, 318BK, 318D, 318G R3C164



ZAG option for mental health applications includes security screws.

322



Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 322A, 322BK, 322D, 322G R3C164



See Perimeter seals Accessories & options page for details.

Finishes:

- A** Aluminum mill finish
- AA** Aluminum clear anodized
- BK** Aluminum black anodized
- D** Aluminum dark bronze anodized
- G** Aluminum gold anodized
- B** Bronze, architectural mill finish
- B-ORB** Oil-rubbed aged bronze

Options:

- FLO** Air flow/ sound block
- PSA** Pressure-sensitive adhesive
- ZAG** Ligature resistant gasketing
- S** Order as a set
- SEC** Security screws

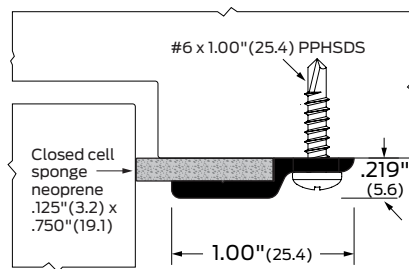
Note:

Perimeter seals

Head and jamb gasketing

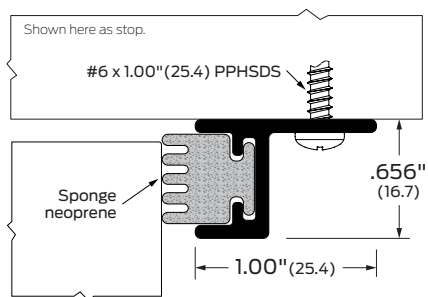


50



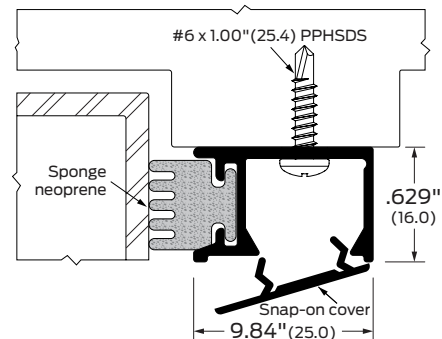
Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 50AA, 50BK, 50D, 50G R3C164
BHMA CERTIFIED

1370



Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 1370A, 1370BK, 1370D, 1370G R3C154
BHMA CERTIFIED

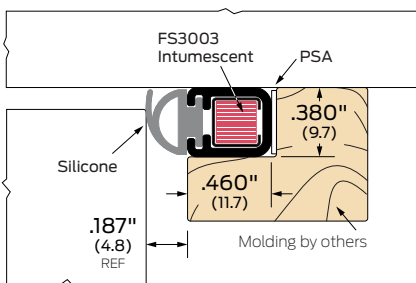
376



Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 376AA, 376BK, 376D, 376G R3C164
BHMA CERTIFIED

Channel may be used for low-voltage wiring, subject to local building codes.

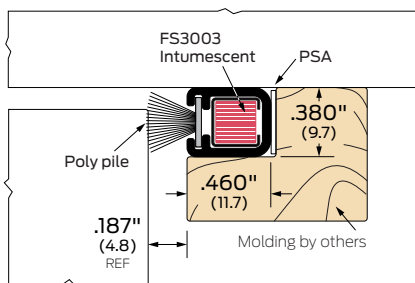
5831FS



Finishes: AA, BK, D, G Options: S ANSI/BHMA: 5831FS-AA, 5831FS-BK, 5831FS-D, 5831FS-G R3U164
BHMA CERTIFIED

Supplied standard with PSA.

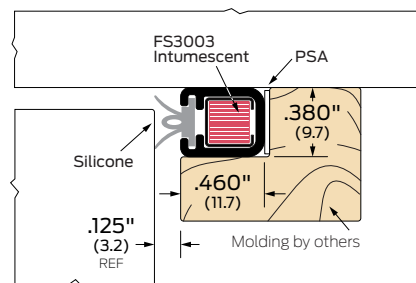
5832FS



Finishes: AA, BK, D, G Options: S ANSI/BHMA: 5832FS-AA, 5832FS-BK, 5832FS-D, 5832FS-G R3V164
BHMA CERTIFIED

Supplied standard with PSA.

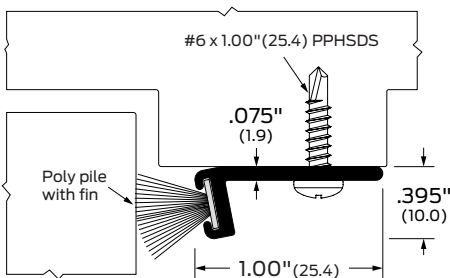
58FS



Finishes: AA, BK, D, G Options: S ANSI/BHMA: 58FS-AA, 58FS-BK, 58FS-D, 58FS-G R3V164
BHMA CERTIFIED

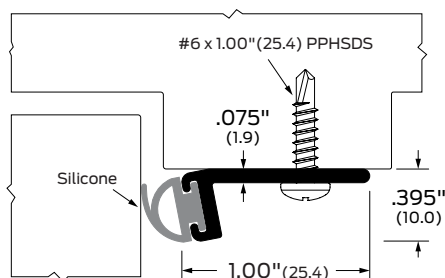
For applications with very small clearances between door and frame. Supplied standard with PSA.

98



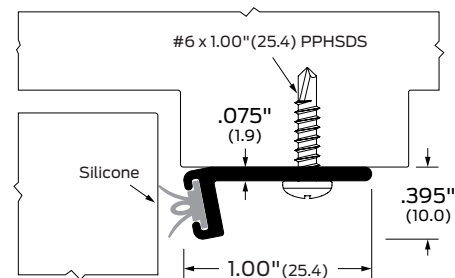
Finishes: A, BK, D, G Options: PSA, S, SEC ANSI/BHMA: 98A, 98BK, 98D, 98G R3F166
BHMA CERTIFIED

99



Finishes: A, BK, D, G Options: ZAG, S, SEC ANSI/BHMA: 99A, 99BK, 99D, 99G R3E164
BHMA CERTIFIED

100



Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 100A, 100BK, 100D, 100G R3E164
BHMA CERTIFIED

For applications with very small clearances between door and frame.

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

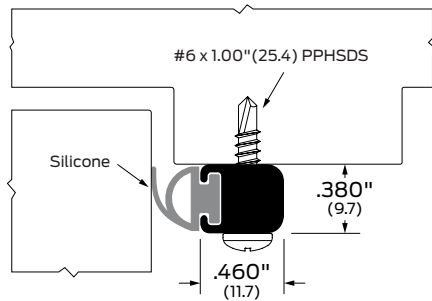
Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

Head and jamb gasketing

31

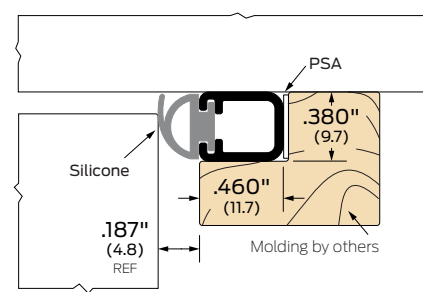


Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 31AA, 31BK, 31D, 31G R3E164



Extruded Bulb/Finger for double-sealing protection.

5831

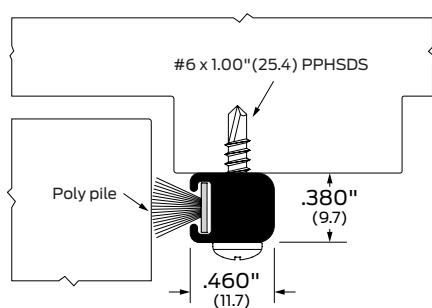


Finishes: AA, BK, D, G Options: S ANSI/BHMA: 5831AA, 5831BK, 5831D, 5831G R3E164



Extruded Bulb/Finger for double-sealing protection. Supplied standard with PSA.

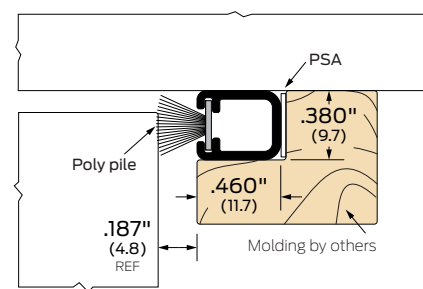
32



Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 32AA, 32BK, 32D, 32G R3F166



5832

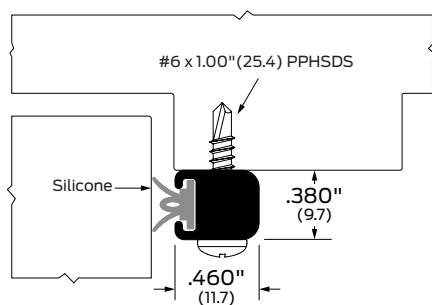


Finishes: AA, BK, D, G Options: S ANSI/BHMA: 5832AA, 5832BK, 5832D, 5832G R3F166



Supplied standard with PSA.

33

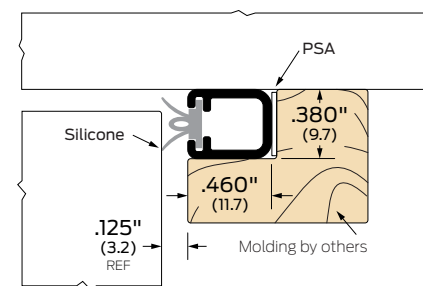


Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 33AA, 33BK, 33D, 33G R3E164



For applications with very small clearances between door and frame.

5833



Finishes: AA, BK, D, G Options: S ANSI/BHMA: 5833AA, 5833BK, 5833D, 5833G R3E1644



For applications with very small clearances between door and frame. Supplied standard with PSA.

See Perimeter seals Accessories & options page for details.

Finishes:

- A** Aluminum mill finish
- AA** Aluminum clear anodized
- BK** Aluminum black anodized
- D** Aluminum dark bronze anodized
- G** Aluminum gold anodized
- B** Bronze, architectural mill finish
- B-ORB** Oil-rubbed aged bronze

Options:

- FLO** Air flow/ sound block
- PSA** Pressure-sensitive adhesive
- ZAG** Ligature resistant gasketing
- S** Order as a set
- SEC** Security screws

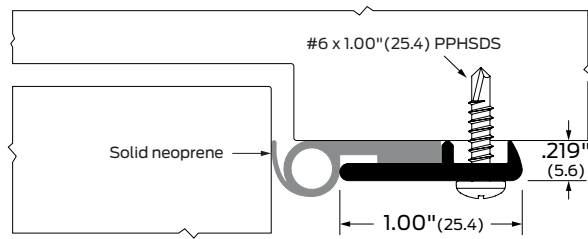
Note:

Perimeter seals

Head and jamb gasketing



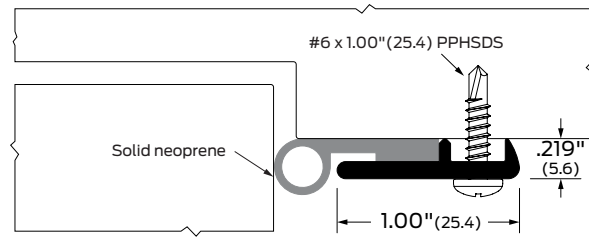
326



Finishes: AA, BK, D, G, B, B-ORB
Options: ZAG, S, SEC
ANSI/BHMA: 326AA, 326BK, 326D, 326G R3B164 R1B164
BHMA CERTIFIED

Extruded Bulb/Finger for double-sealing protection.

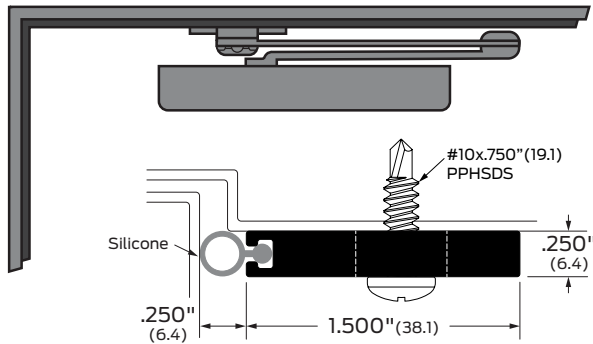
328



Finishes: AA, BK, D, G, B, B-ORB
Options: ZAG, S, SEC
ANSI/BHMA: 328AA, 328BK, 328D, 328G R3B164 R1B164
BHMA CERTIFIED

ZAG option for mental health applications includes security screws

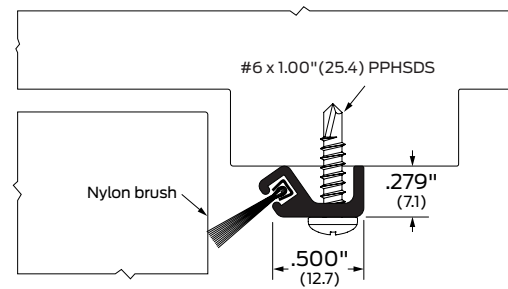
429



Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 429AA, 429BK, 429D, 429G R3E164
BHMA CERTIFIED

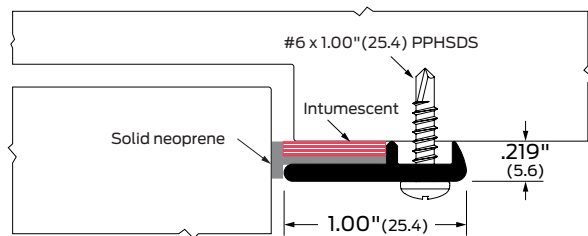
Gasketing protection for closer bracket or door coordinator.

8305



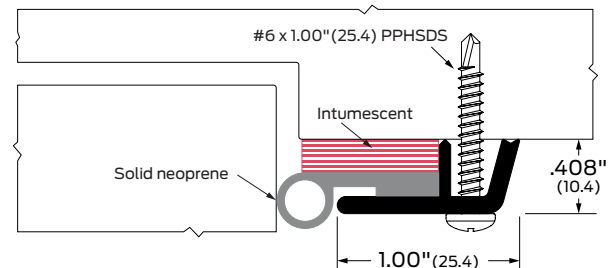
Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 8305AA, 8305BK, 8305D, 8306G R3A166
BHMA CERTIFIED

302FS



Finishes: AA, BK, D, G, B, B-ORB
Options: S, SEC
ANSI/BHMA: 302FS-AA, 302FS-BK, 302FS-D, 302FS-G R3R164 R1R164
BHMA CERTIFIED

328FS



Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 328FS-AA, 328FS-BK, 328FS-D, 328FS-G R3R164
BHMA CERTIFIED

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

Head and jamb gasketing

Thresholds

Automatic door bottoms

Perimeter seals

Weatherstripping

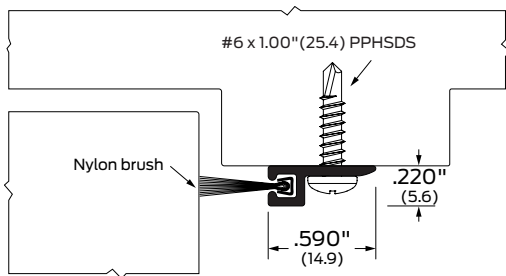
Intumescent

Sound control

Specialty applications

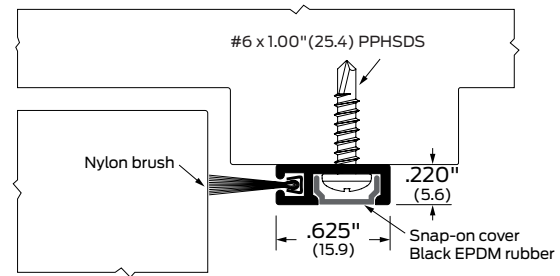
Appendix

8193



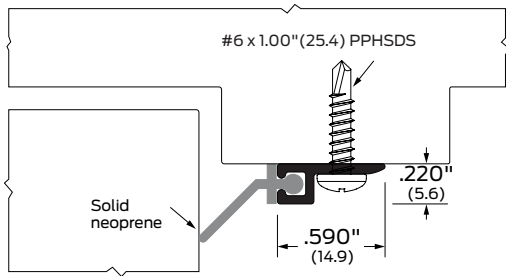
Finishes: AA, BK, D, G
Options: PSA, S, SEC
ANSI/BHMA: 8193AA, 8193BK, 8193D, 8193G R3A166

8879



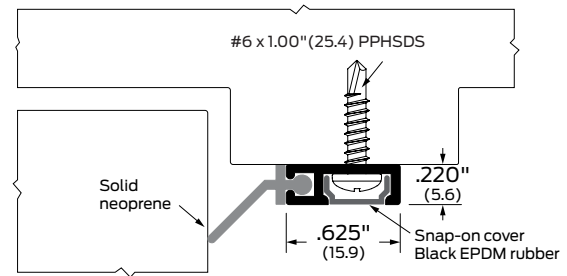
Finishes: AA, BK, D, G
Options: PSA, S, SEC
ANSI/BHMA: 8879AA, 8879BK, 8879D, 8879G R3A166

8302



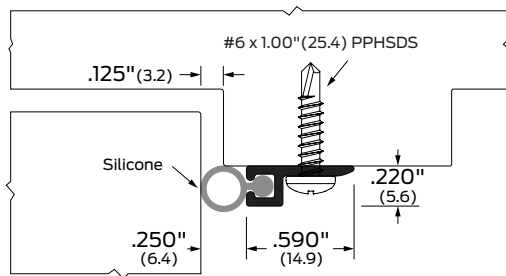
Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 8302AA, 8302BK, 8302D, 8302G R3B164

8877



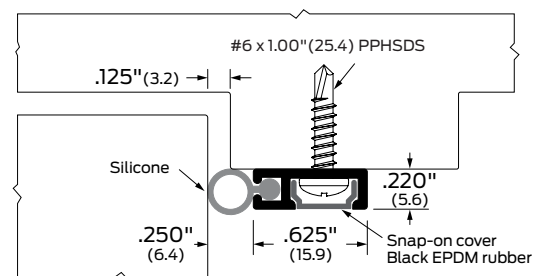
Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 8877AA, 8877BK, 8877D, 8877G R3B164

8303



Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 8303AA, 8303BK, 8303D, 8303G R3E164

8878



Finishes: AA, BK, D, G
Options: S, SEC
ANSI/BHMA: 8878AA, 8878BK, 8878D, 8878G R3E164

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

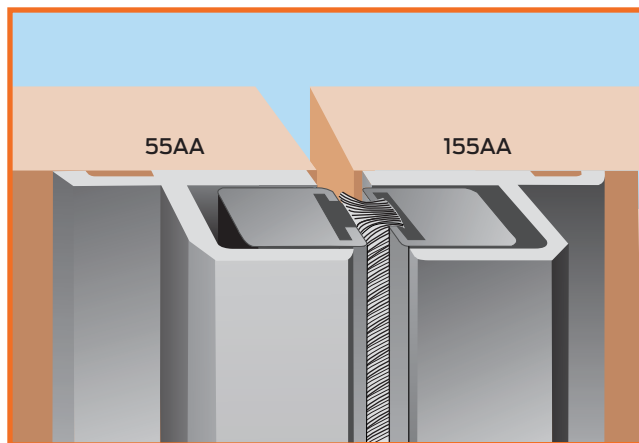
FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

Perimeter seals

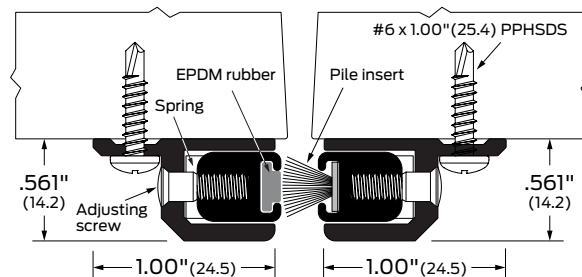
Meeting stiles

Adjustable surface-mounted meeting stiles for beveled doors



55

155



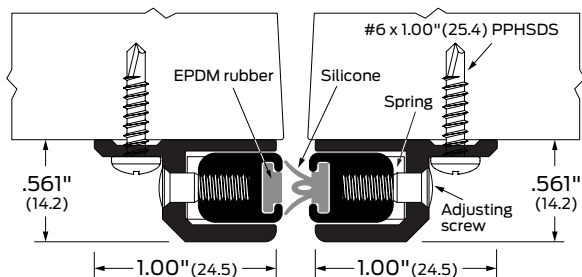
Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 55AA/155AA, 55BK/155BK, 55D/155D, 55G/155G R3F836



Fire-rated as a set--both components required. Order components separately.

55

555



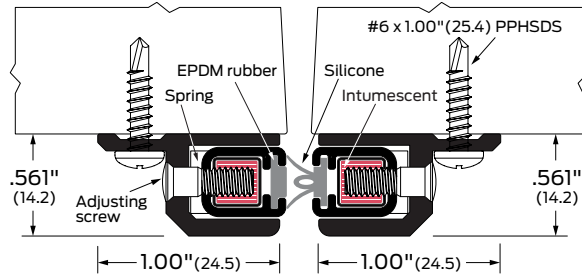
Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 55AA/555AA, 55BK/555BK, 55D/555D, 55G/555G R3E834



Fire-rated as a set--both components required. Order components separately.

55FS

555FS

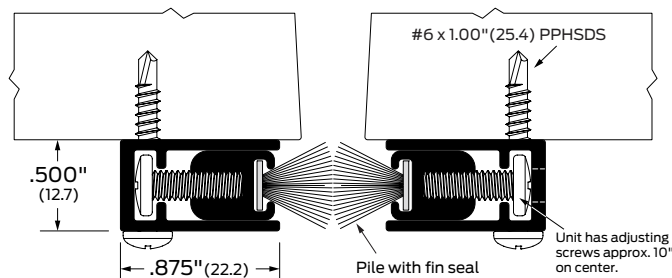


Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 55FS-AA/555FS-AA, 55FS-BK/555FS-BK, 55FS-D/555FS-D, 55FS-G/555FS-G R3U834



Fire-rated as a set--both components required. Order components separately.

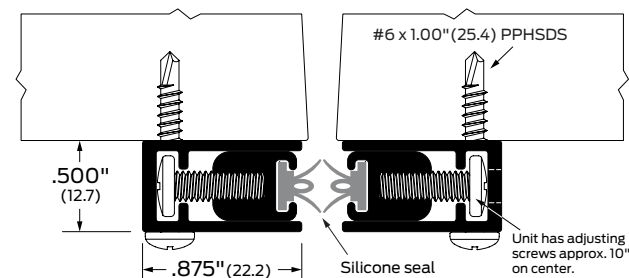
871



Finishes: AA, BK, D, G Options: S, SEC ANSI/BHMA: 871AA, 871BK, 871D, 871G R3F735



873



Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 873AA, 873BK, 873D, 873G R3E734



See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

Follow NPFA 80 requirements for fire door clearances.

Meeting stiles

Adjustable mortised meeting stiles for bull-nosed doors

Thresholds

Automatic door bottoms

Perimeter seals

Weatherstripping

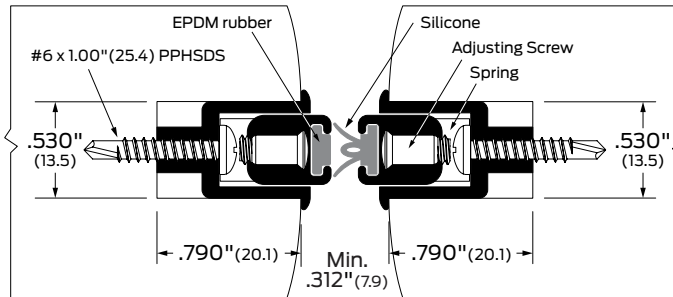
Intumescent

Sound control

Specialty applications

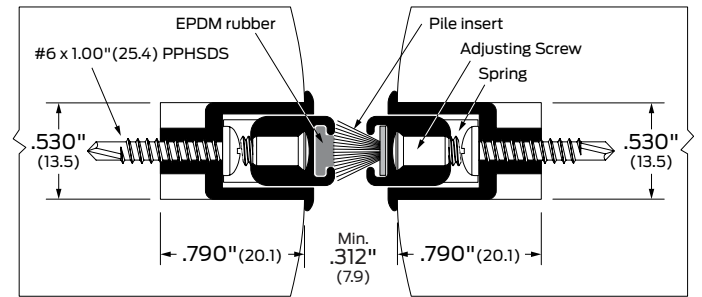
Appendix

56



557

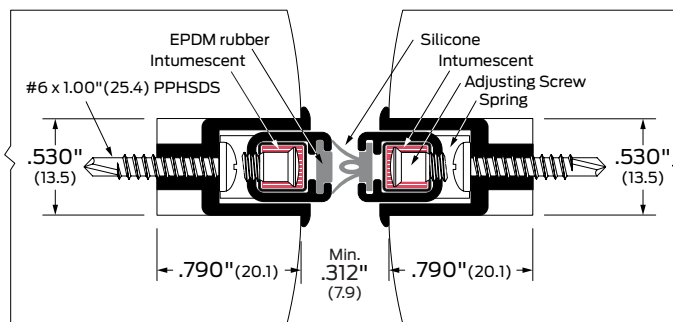
56



Finishes: ANSI/BHMA:
AA, BK, 56AA/557AA, 56BK/557BK, 56D/557D, 56G/557G R3E824
D, G **BHMA**
Order components separately.

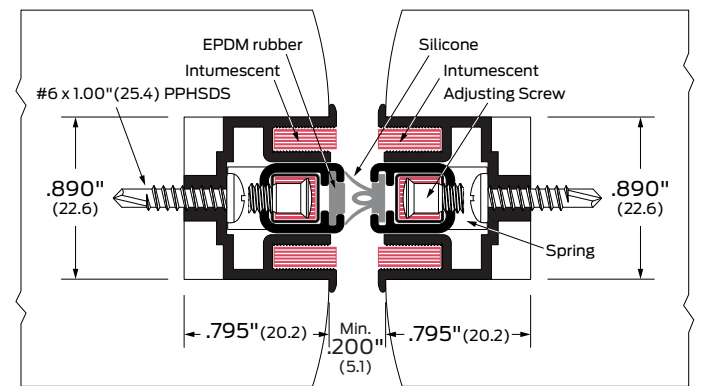
Finishes: ANSI/BHMA:
AA, BK, 56AA/156AA, 56BK/156BK, 56D/156D, 56G/156G R3F825
D, G **BHMA**
Order components separately.

56FS



557FS

3056FS



Finishes: ANSI/BHMA:
AA, BK, 56FS-AA/ 557FS-AA, 56FS-BK/ 557FS-BK,
56FS-D/ 557FS-D, 56FS-G/ 557FS-G R3U824
D, G **BHMA**
Order components separately.

Finishes: ANSI/BHMA:
AA, BK, 3056FS-AA/ 3557FS-AA, 3056FS-BK/ 3557FS-BK,
3056FS-D/ 3557FS-D, 3056FS-G/ 3557FS-G R3U824
D, G **BHMA**
Fire-rated as a set--both components required. Order components separately.

See Perimeter seals Accessories & options page for details.

Finishes:

- A** Aluminum mill finish
- AA** Aluminum clear anodized
- BK** Aluminum black anodized
- D** Aluminum dark bronze anodized
- G** Aluminum gold anodized
- B** Bronze, architectural mill finish
- B-ORB** Oil-rubbed aged bronze

Options:

- FLO** Air flow/ sound block
- PSA** Pressure-sensitive adhesive
- ZAG** Ligature resistant gasketing
- S** Order as a set
- SEC** Security screws

Note:

Follow NPFA 80 requirements for fire door clearances.

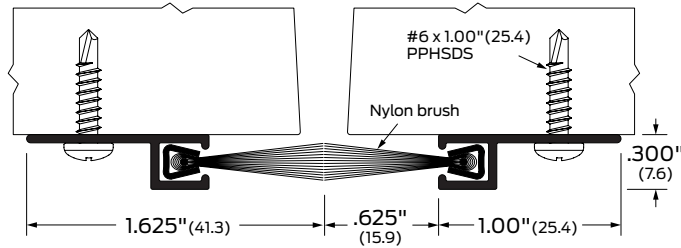
Perimeter seals

Meeting stiles

Surface-mounted meeting stiles for beveled doors, both doors active

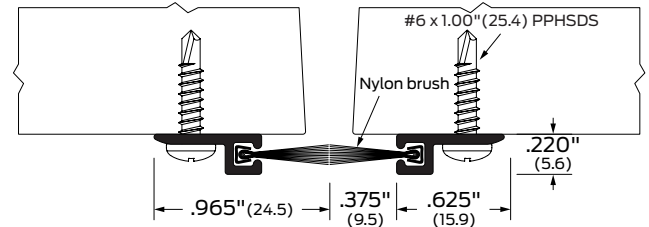


8192



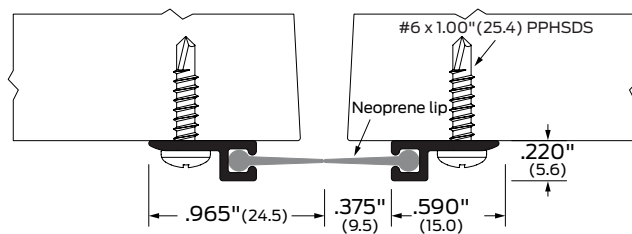
Finishes: AA, BK, D, G Options: PSA, SEC ANSI/BHMA: 8192AA, 8192BK, 8192D, 8192G R3A735
BHMA
 CERTIFIED

8193



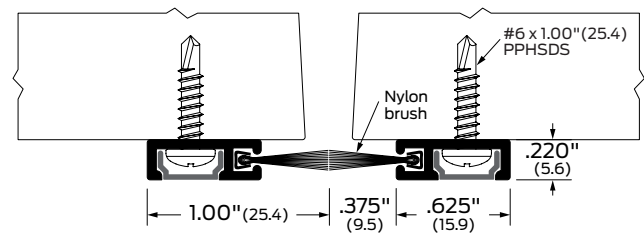
Finishes: AA, BK, D, G Options: PSA, SEC ANSI/BHMA: 8192AA, 8192BK, 8192D, 8192G R3A735
BHMA
 CERTIFIED

8194



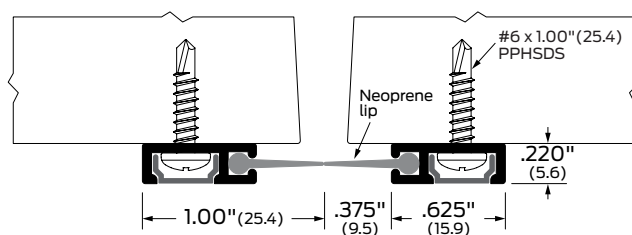
Finishes: AA, BK, D, G Options: PSA, SEC ANSI/BHMA: 8192AA, 8192BK, 8192D, 8192G R3A735
BHMA
 CERTIFIED

8879



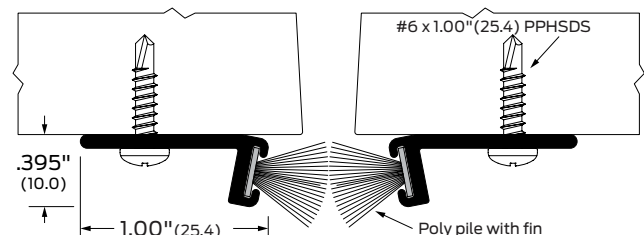
Finishes: AA, BK, D, G Options: PSA, S, SEC ANSI/BHMA: 8879AA, 8879BK, 8879D, 8879G R3A735
BHMA
 CERTIFIED

8195



Finishes: AA, BK, D, G Options: PSA, SEC ANSI/BHMA: 8195AA, 8195BK, 8195D, 8195G R3B734
BHMA
 CERTIFIED

98



Finishes: A, BK, D, G Options: PSA, S, SEC ANSI/BHMA: 98A, 98BK, 98D, 98G R3F735
BHMA
 CERTIFIED

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

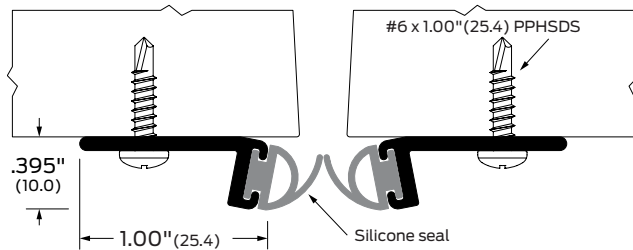
For stile applications order two of each model, or mix and match models if desired.

Follow NFPA-80 requirements for fire door clearances.

Meeting stiles

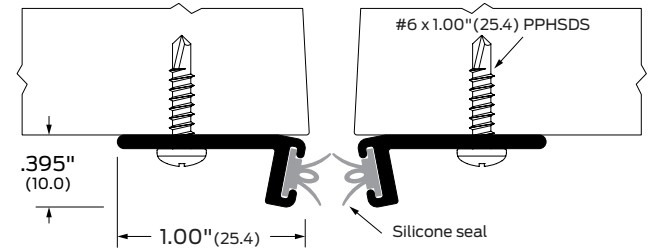
Surface-mounted meeting stiles for beveled doors, both doors active (cont.)

99



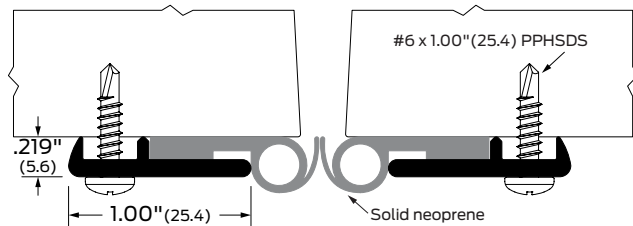
Finishes: A, BK, D, G
Options: ZAG, S, SEC
ANSI/BHMA: 99A, 99BK, 99D, 99G
R3E735
BHMA CERTIFIED

100



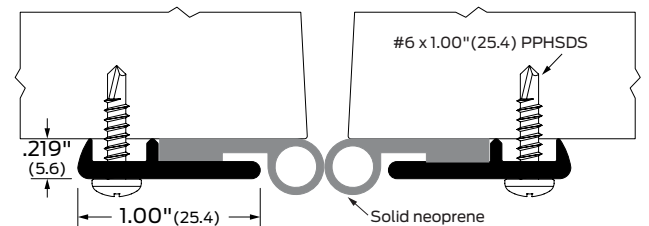
Finishes: A, BK, D, G
Options: S, SEC
ANSI/BHMA: 100A, 100BK, 100D, 100G
R3E734
BHMA CERTIFIED

326



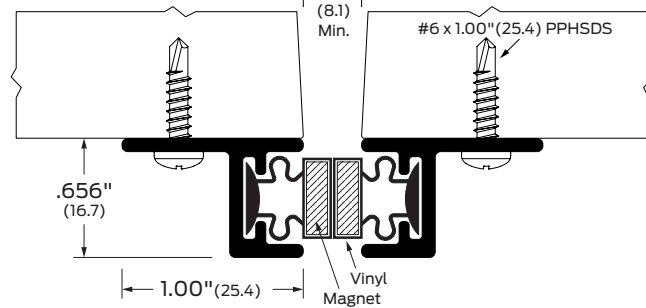
Finishes: AA, BK, D, G, B, B-ORB
Options: ZAG, S, SEC
ANSI/BHMA: 326AA, 326BK, 326D, 326G
R3B735
BHMA CERTIFIED

328



Finishes: AA, BK, D, G, B, B-ORB
Options: ZAG, S, SEC
ANSI/BHMA: 328AA, 328BK, 328D, 328G
R3B735
BHMA CERTIFIED

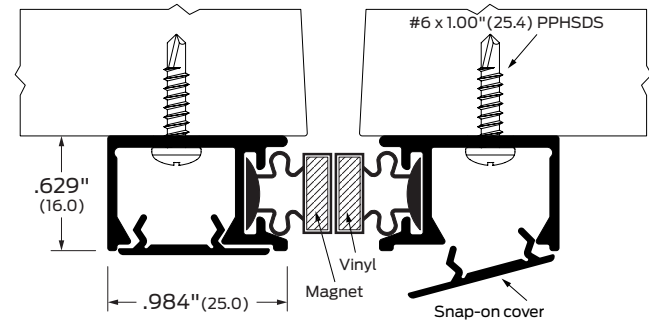
370



Finishes: AA, BK, D, G
ANSI/BHMA: 370AA, 370BK, 370D, 370G
R3L734
BHMA CERTIFIED

Magnetic meeting stiles for use with metal interior doors only.
Available to order as engineering special.

375



Finishes: AA, BK, D, G
ANSI/BHMA: 375AA, 375BK, 375D, 375G
R3L734
BHMA CERTIFIED

Magnetic meeting stiles for use with metal interior doors only.
Available to order as engineering special.

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

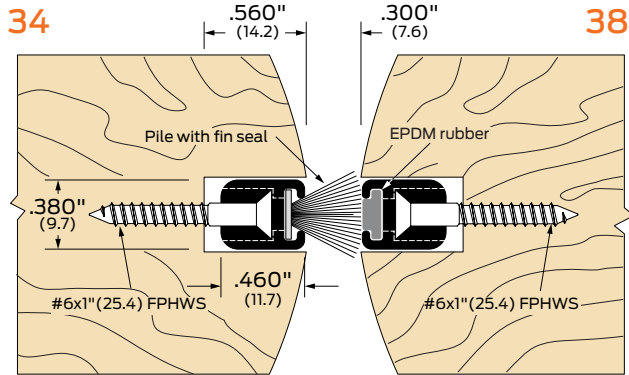
For stile applications order two of each model, or mix and match models if desired.

Follow NFPA-80 requirements for fire door clearances.

Perimeter seals

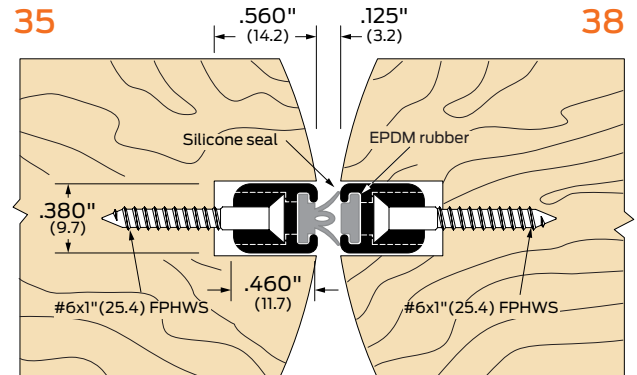
Meeting stiles

Mortised meeting stiles for bull-nosed doors, both doors active



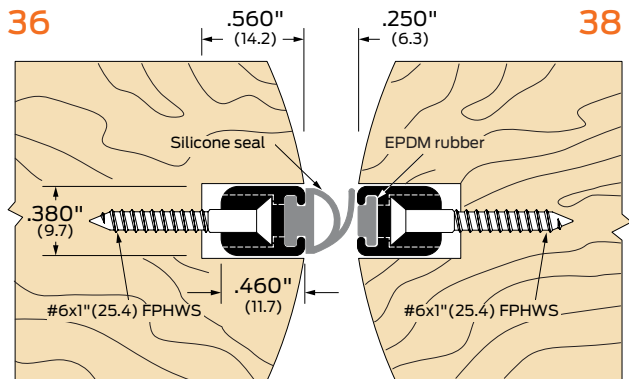
Finishes: ANSI/BHMA:
AA, BK, 34AA, 34BK, 34D, 34G R3F825
D, G
BHMA
CERTIFIED

Order components separately.



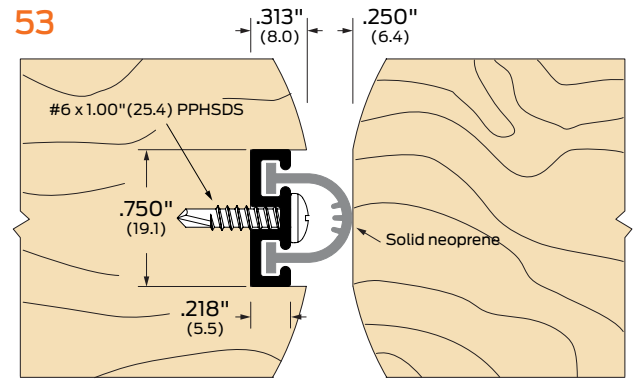
Finishes: ANSI/BHMA:
AA, BK, 35AA, 35BK, 35D, 35G R3E824
D, G
BHMA
CERTIFIED

Order components separately.

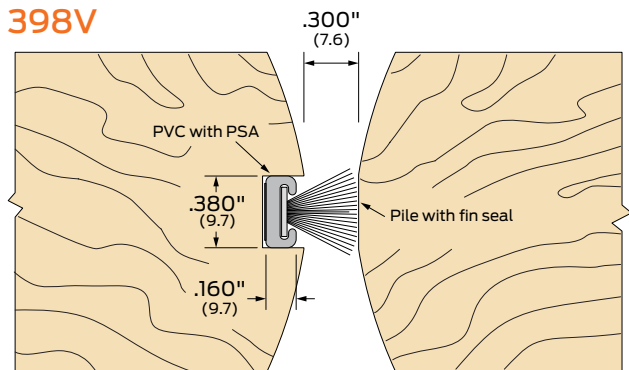


Finishes: ANSI/BHMA:
AA, BK, 36AA, 36BK, 36D, 36G R3E824
D, G
BHMA
CERTIFIED

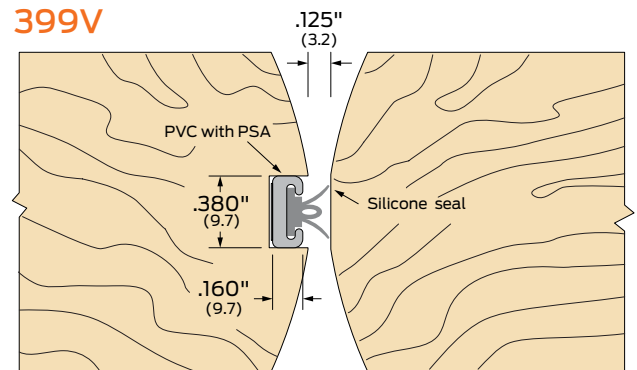
Order components separately.



Finishes: Options: ANSI/BHMA:
A SEC 53A R3B724
BHMA
CERTIFIED



Finishes:
Solid PVC-brown. Supplied standard with PSA



Finishes:
Solid PVC-brown. Supplied standard with PSA

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

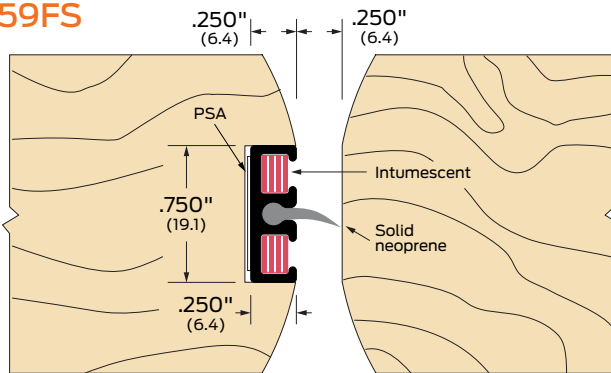
Note:

Follow NFPA-80 requirements for fire door clearances.

Meeting stiles

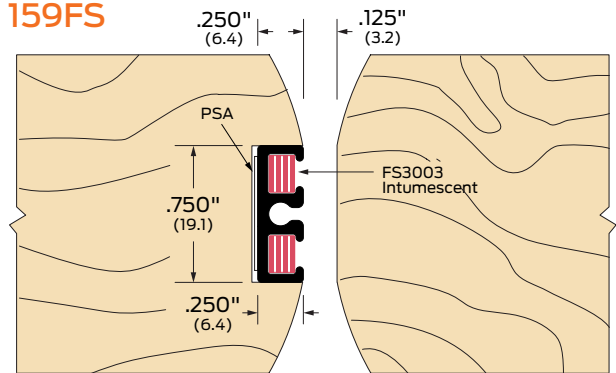
Mortised meeting stiles for bull-nosed doors, both doors active. (cont.)

59FS



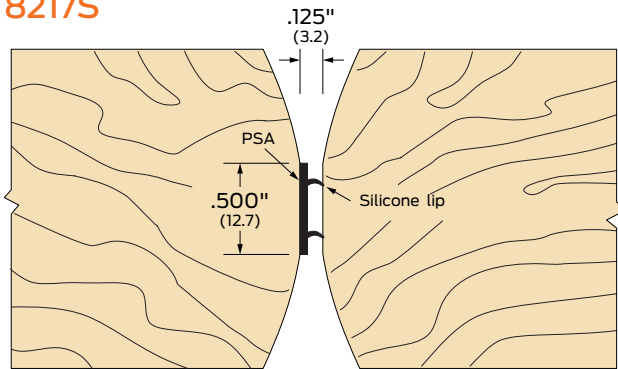
Finishes: ANSI/BHMA:
A 59FS-A R3R724
BHMA
CERTIFIED
Supplied standard with PSA.

159FS



Finishes: ANSI/BHMA:
A 159FS-A R3P7246
BHMA
CERTIFIED
Supplied standard with PSA.

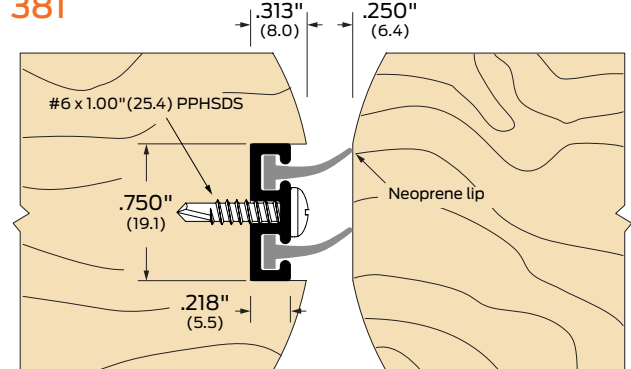
8217S



Finishes:
S-BK
Black silicone

Very low profile, for door pairs with very small clearance. Also suitable for glass doors.
Supplied standard with PSA.

381



Finishes: Options: ANSI/BHMA:
A FLO, SEC 381A R3B724
BHMA
CERTIFIED

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

See Ives catalog for door coordinators.
Follow NFPA-80 requirements for fire door clearances.

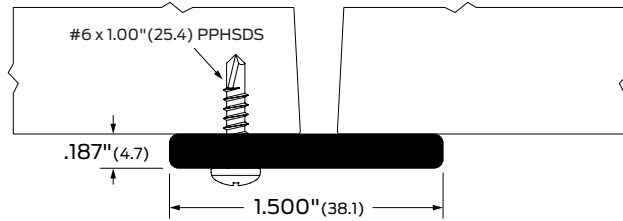
Perimeter seals

Meeting stiles

Astragals — One door active or coordinating doors

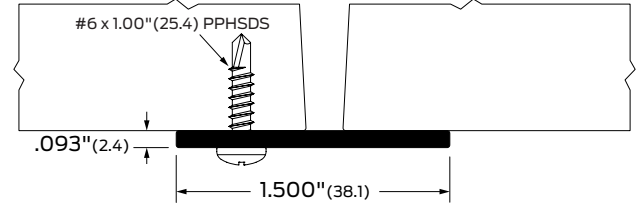


905



Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 905AA, 905BK, 905D, 905G R3Y636
BHMA
 CERTIFIED

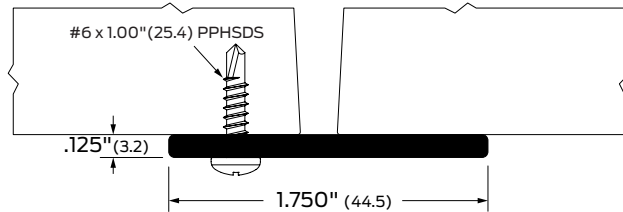
44



Finishes: STST Options: SEC ANSI/BHMA: 44STST R5Y636
BHMA
 CERTIFIED

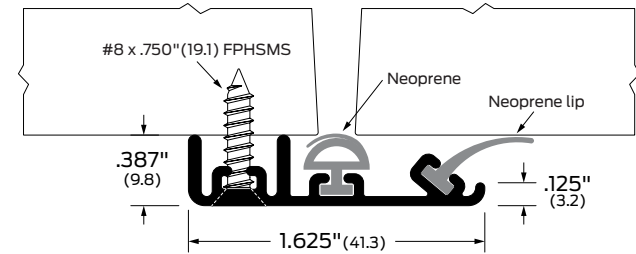
Stainless steel finish only.

47



Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 47AA, 47BK, 47D, 47G R3Y636
BHMA
 CERTIFIED

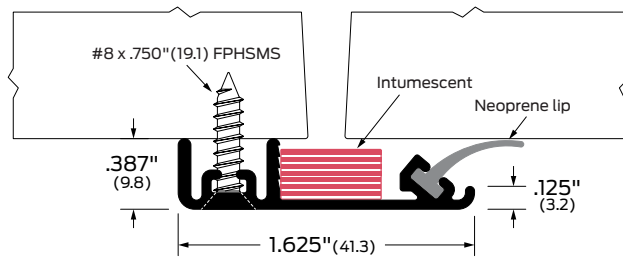
383



Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 383AA, 383BK, 383D, 383G R3B634
BHMA
 CERTIFIED

90 minute max fire rating

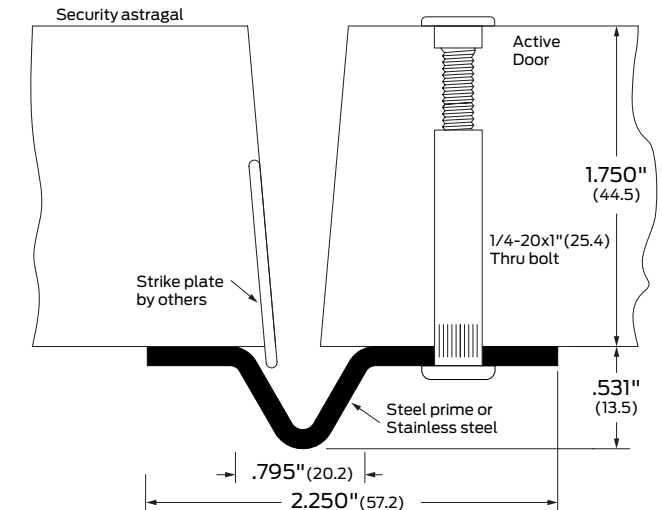
383FS



Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 383FS-AA, 383FS-BK, 383FS-D, 383FS-G R3B634
BHMA
 CERTIFIED

90 minute max fire rating

43



Finishes: SP, STST

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Anti-ligature gasketing
S Order as a set
NH No holes
NRGC Rubber not assembled, no glue or no crimp on seal
SEC Security screws

Note:

See Ives catalog for door coordinators.

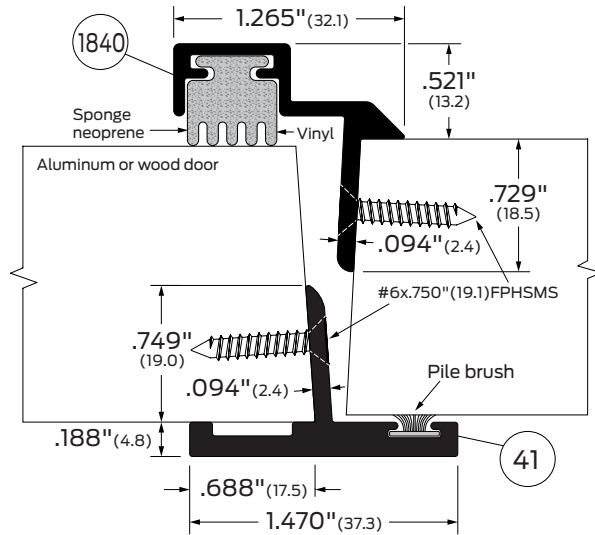
Finishes: SP = Steel Primed, STST=Stainless Steel.

Follow NFPA 80 requirements for fire door clearances.

Meeting stiles

Astragals — One door active or coordinating doors (cont.)

1840/41



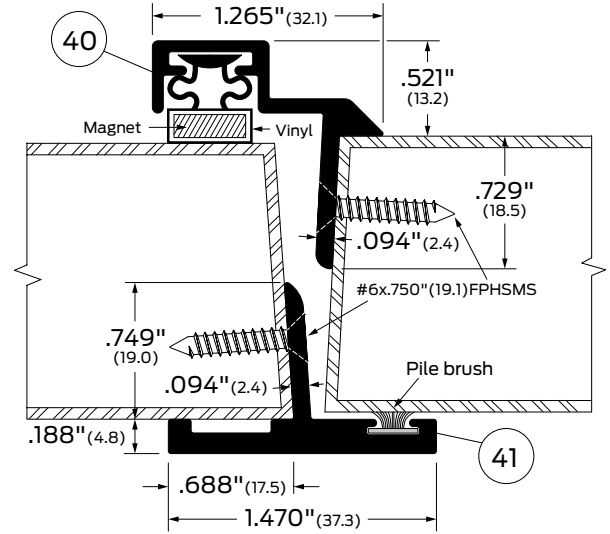
1840

Finishes: ANSI/BHMA:
AA, BK, 1840AA, 1840BK, 1840D, 1840G R3C635
D, G
Astragal, inswing.

41

Finishes: ANSI/BHMA:
AA, BK, 41AA, 41BK, 41D, 41G R3F636
D, G
 BHMA
CRACKED

40/41



40

Finishes: ANSI/BHMA:
AA, BK, 40AA, 40BK, 40D, 40G R3L635
D, G

Magnetic astragal, inswing. For use on interior metal doors only. Available to order as engineering special.

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

See Ives catalog for door coordinators.

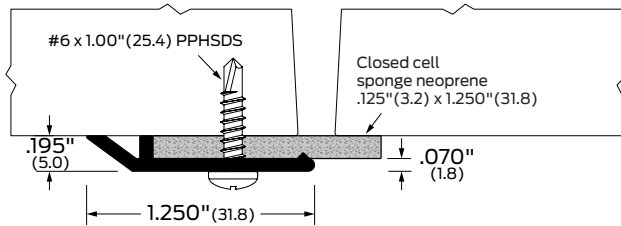
Perimeter seals

Meeting stiles

Astragals — One door active or coordinating doors (cont.)

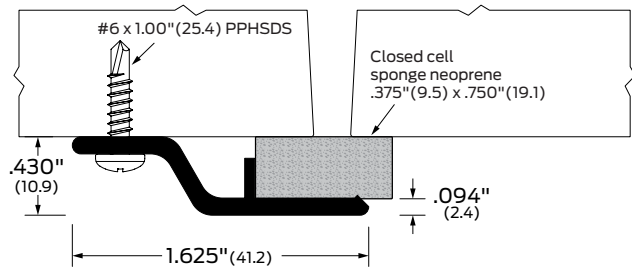


139



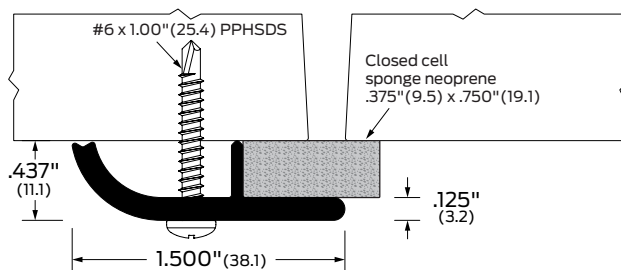
Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 139A, 139BK, 139D, 139G R3C634
BHMA
 CERTIFIED

140



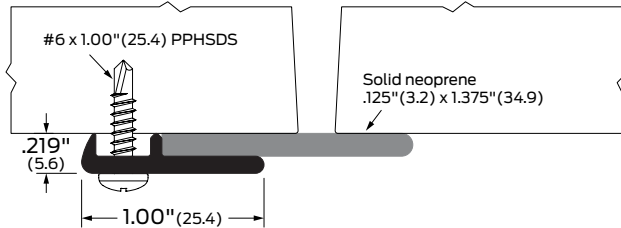
Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 140A, 140BK, 140D, 140G R3C634
BHMA
 CERTIFIED

322



Finishes: A, BK, D, G Options: S, SEC ANSI/BHMA: 322A, 322BK, 322D, 322G R3C164 R3C634
BHMA
 CERTIFIED

339



Finishes: AA, BK, D, G, B, B-ORB Options: SEC ANSI/BHMA: 339AA, 339BK, 339D, 339G R3B634 R1B634
BHMA
 CERTIFIED

See Perimeter seals Accessories & options page for details.

Finishes:

A Aluminum mill finish
AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized
B Bronze, architectural mill finish
B-ORB Oil-rubbed aged bronze

Options:

FLO Air flow/ sound block
PSA Pressure-sensitive adhesive
ZAG Ligature resistant gasketing
S Order as a set
SEC Security screws

Note:

See Ives catalog for door coordinators.



Specialized solutions

Door closer mounting brackets

These mounting brackets can be used to protect gasketing when installed with an LCN® door closer or with products supplied by other manufacturers. See the table below to determine which bracket model to use with a chosen gasketing model.



328SPB

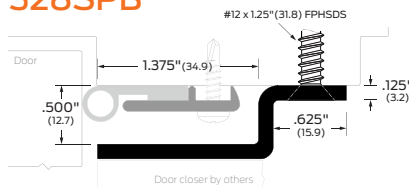


870SPB



770SPB

328SPB



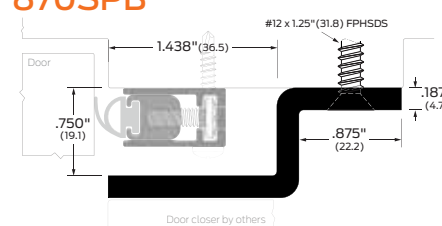
Finishes:

Steel-prime painted



Door closer mounting bracket 6" (152.4) long

870SPB



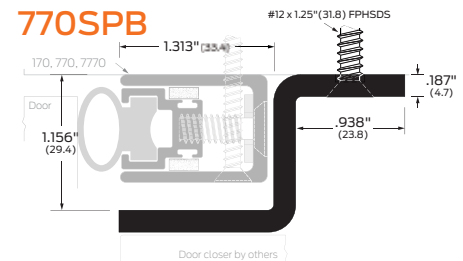
Finishes:

Steel-prime painted



Door closer mounting bracket 6" (152.4) long

770SPB



Finishes:

Steel-prime painted



Door closer mounting bracket 6" (152.4) long

Compatible gasketing for door closer brackets

328SPB		870SPB		770SPB	
Height	Width	Height	Width	Height	Width
.500"	1.375"	.750"	1.438"	1.156"	1.313"
31, 32, 33, 50, 58FS, 98, 99, 100, 139, 312, 314, 326, 328, 475, 485, 5831, 5831FS, 5832, 5832FS, 5833, 8193, 8302, 8303, 8305, 8306, 8877, 8878, 8879		270, 272, 318, 322, 370, 375, 376, 470, 472, 478, 712, 870, 871, 873, 1370		170, 770, 3708, 3709, 770FS, 770SP, 770STST, 7770	

See Perimeter seals Accessories & options page for details.

Finishes:

- A Aluminum mill finish
- AA Aluminum clear anodized
- BK Aluminum black anodized
- D Aluminum dark bronze anodized
- G Aluminum gold anodized
- B Bronze, architectural mill finish
- B-ORB Oil-rubbed aged bronze

Options:

- FLO Air flow/ sound block
- PSA Pressure-sensitive adhesive
- ZAG Ligature resistant gasketing
- S Order as a set
- SEC Security screws

Note:





Weatherstripping

Door sealing systems



Weatherstripping

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Accessories & options

Finishes/Options	92
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Kerf frame weatherstripping

8810S	94
8800S	94
8052N	94
8812S	94
8841R	94
8004N	94
8043N	95
8048S	95
8054S	95
8055S	95
8056S	95
8053Q	95

Self-adhesive weatherstripping

Solid neoprene and silicone seals

188S/188FS/188BIO	96
8144S/8144FS	96
8042S	96
488S/488FS/488BIO	96
8145S	96
824N	96
8216S	97
117S	97
8150S	97

Closed cell sponge neoprene seals

8172N	97
8770N	97
312N	97
8780N	97
139N	97
826N	97
926N	97
318N	97
3708N	97
2070N	98
810N	98
811N	98
812N	98
813N	98

Pile brush seals

137P	98
8136P	98
34P	98

Weatherstripping for doors and windows

Cushion-spring seals for wood doors and frames

18	99
19	99
19W	99
118	99
119	99
119W	99

Jamb seals for double-hung wood windows

4	99
5	99
400	99
500	99
4000	99
5000	99

PSA Weatherstripping for glass doors

PVC glass edge protection for swinging and sliding doors

135	100
136	100

Poly pile seals with PVC and polycarbonate housings – for swinging and sliding doors

137	100
138	100
8136	100
8137	100
8138	100

Edge protection for glass sliding doors

135/137	101
136/138	101
137P	101
9137	101
9131	101

Astragals for swinging doors

133	101
134	101

Glass door meeting stiles—surface mounted self-adhesive, both doors active

8192	102
8193	102
98	102
8194	102

Weatherstripping Introduction

Designed for durability and optimal performance

Zero offers a comprehensive selection of kerf seals and pressure-sensitive adhesive (PSA) rubber seals in a variety of materials.

With a broad portfolio, Zero offers solutions for a variety of challenging applications. Zero's unique profiles and versatile shapes deliver the best performance for common sealing challenges.

- Metal weatherstripping enables specifiers to optimize sealing solutions for a wide range of door and double-hung window applications.
- Glass door weatherstripping includes solutions for sliding and swinging glass doors.

Special features, such as state of the art adhesive, set Zero apart. Our PSA products are constructed using the highest-quality self-adhesives for superior adhesion even when the surface is contaminated with oil. Making them perfect for applications where budget or installation factors favor the use of PSA gasketing. Thoughtful engineering and design details include a subtle indentation in the extruded profile of Zero tear drop seals that enhances the wrap of the rubber for a tighter seal.

A variety of material options are available to customize a solution for the specific needs of your application.

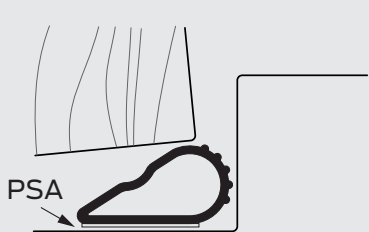
- Silicone rubber can handle many applications including those with temperature extremes (S)
- Neoprene rubber a versatile material for heavy duty applications (N)
- Intumescent for fire and smoke protection (FS)
- BioWall rubber with anti-microbial inhibitor for infection control (BIO)
- EPDM rubber excellent for outdoor use (R)
- Vinyl Covered Foam (Q)

High quality self adhesive

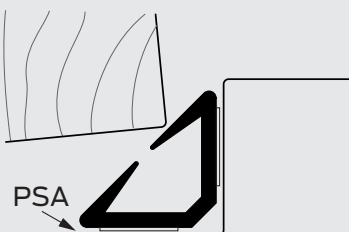
- Strong initial adhesion
- Long term holding power
- Holds well even on contaminated surfaces

Most Zero weatherstripping products use best-in-class 3M 9495LE adhesive tape.

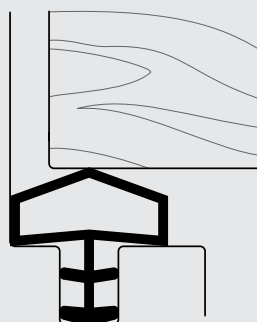
188



8144



8810

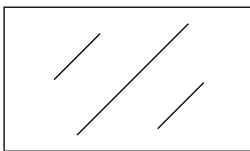
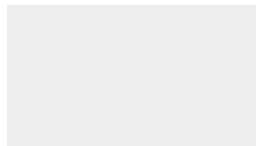


Weatherstripping

Accessories & options



Finishes

**BK**
Black**BR**
Brown**CL**
Clear**GY**
Gray**WH**
White**B**
Bronze, Architectural
Mill Finish**Z**
Zinc Mill Finish

Options

PSA Pressure-sensitive adhesive**ZAG** Ligature-resistant gasketing

Pressure-sensitive adhesive (PSA)

Many weatherstripping products are supplied standard with a high quality 3M adhesive. PSA is also available as an option on other models. See profile for information on standard or optional PSA.

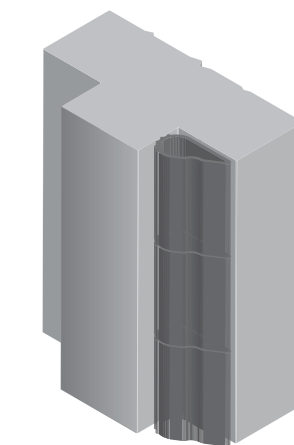
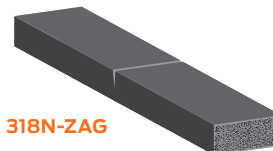
Ligature-resistant gasketing (ZAG)

This patented ligature-resistant option prevents unintended usage of the gasketing, including harming oneself or others. When ZAG is specified, the rubber is scored before insertion into the aluminum extrusion. This allows the seal to function as intended, but it will now break apart if removal is attempted or any weight is placed on the seal.

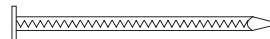
Fasteners

Weatherstripping is supplied with the appropriate fasteners and quantities needed for installation based on order length. Use the part numbers below for ordering additional screws.

Models	Category	Part number	Finish	Details
4, 5, 18, 19, 19W, 23, 400, 500, 4000, 5000	Metal weatherstripping	47253928	B, Z	10 Nails #16 x 7/8" and 10 Waferhead drive screws #4 x 5/16"

**188-ZAG****318N-ZAG**

For hollow metal doors
#4 x 5/16" wafer-head drive screws
used for installation on metal doors



For wood doors
#16 x 7/8" weatherstrip nails used
for installation on wood doors

See Weatherstripping Accessories & options page for details.

Finishes:

BK Black
BR Brown
CL Clear
GY Gray
WH White
B Architectural mill finish bronze
Z Mill finish Zinc

Options:

PSA Pressure-sensitive adhesive
ZAG Ligature-resistant gasketing



Weatherstripping order guide

How to order

	Model	Finish	Length	Options
	188S	BK	17	
Models				
Example				
5				
19W				
188S				
318N				
4000				
824N				
Finishes*				
B - Architectural mill finish Bronze				
BK - Black				
BR - Brown				
CL - Clear				
GY - Gray				
WH - White				
Z - Mill finish Zinc				
*See profile for finish options.				
Length				
For all lengths, specify feet desired US std. measure.				
Example common Weatherstripping rolls:				
17 - 17' roll for std. 3070 door				
18 - 18' roll				
19 - 19' roll				
20 - 20' roll for std. double door				
25 - for double doors to 8' wide x 8' high				
Options				
PSA - Pressure sensitive adhesive, standard on some models				
ZAG - Ligature-resistant				

See Weatherstripping Accessories & options page for details.

Finishes:

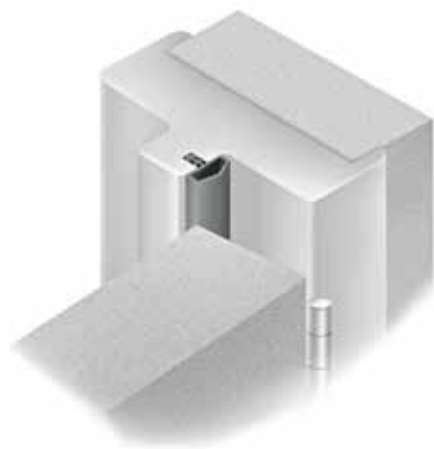
BK Black
BR Brown
CL Clear
GY Gray
WH White
B Architectural mill finish bronze
Z Mill finish Zinc

Options:

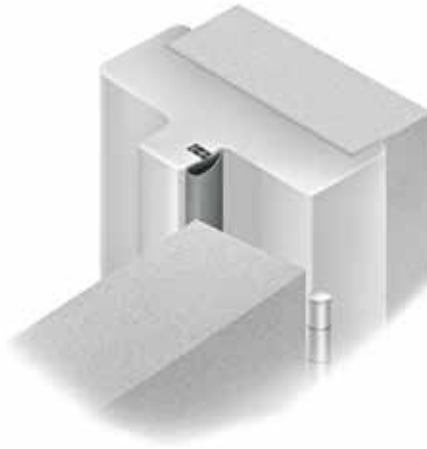
PSA Pressure-sensitive adhesive
ZAG Ligature-resistant gasketing

Weatherstripping

Kerf frame weatherstripping



8810

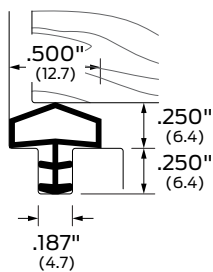


8880



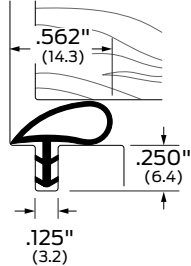
8052

8810S



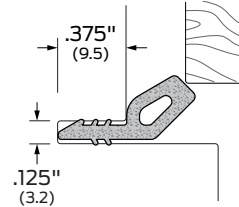
Finishes: BK, WH
 ANSI/BHMA: 8810S ROE186
BHMA
 CERTIFIED

8800S



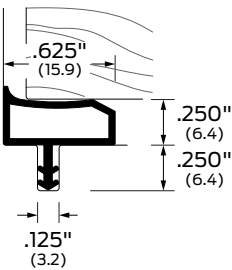
Finishes: BK, WH
 ANSI/BHMA: 8800S ROE186
BHMA
 CERTIFIED

8052N



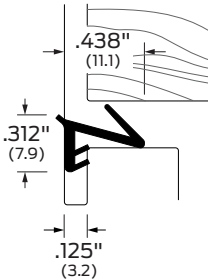
Finishes: BK
 ANSI/BHMA: 8052N ROC186
BHMA
 CERTIFIED
 Closed cell sponge neoprene rubber.

8812S



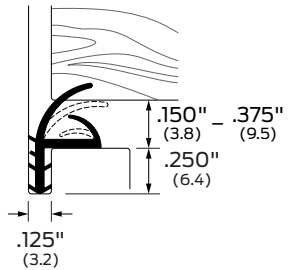
Finishes: BK, WH

8841R



Finishes: BK
 ANSI/BHMA: 8841R ROJ186
BHMA
 CERTIFIED
 EPDM rubber.

8004N



Finishes: BK
 ANSI/BHMA: 8004N ROB186
BHMA
 CERTIFIED

See Weatherstripping Accessories & options page for details.

Finishes:

BK Black
BR Brown
CL Clear
GY Gray
WH White
B Architectural mill finish bronze
Z Mill finish Zinc

Options:

PSA Pressure-sensitive adhesive
ZAG Ligature-resistant gasketing

Note:

See door manufacturer specifications for minimum required clearance between door and frame. Most models shown are available in neoprene (N) or silicone (S). Both materials are self-extinguishing and non-staining.

Kerf frame weatherstripping

Thresholds

Automatic door bottoms

Perimeter seals

Weatherstripping

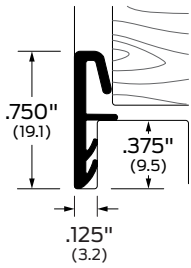
Intumescent

Sound control

Specialty applications

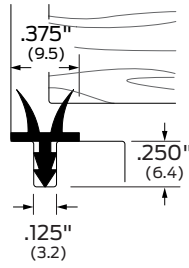
Appendix

8043N



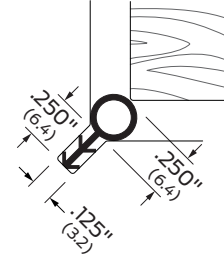
Finishes: BK
ANSI/BHMA: 8043N ROE186
BHMA CERTIFIED

8048S



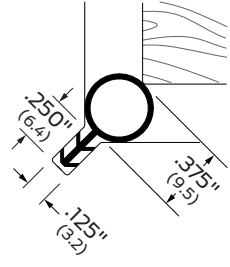
Finishes: BK
ANSI/BHMA: 8048S ROE186
BHMA CERTIFIED

8054S



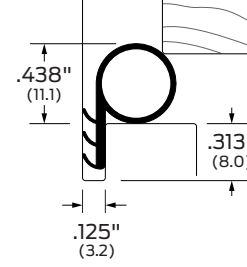
Finishes: BK, WH
ANSI/BHMA: 8054S ROE186
BHMA CERTIFIED

8055S



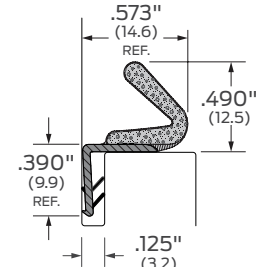
Finishes: BK, WH
ANSI/BHMA: 8055S ROE186
BHMA CERTIFIED

8056S



Finishes: WH
ANSI/BHMA: 8056S ROE186
BHMA CERTIFIED

8053Q



Finishes: BR, WH
ANSI/BHMA: 8053Q ROY186
BHMA CERTIFIED
Vinyl-covered foam.

See Weatherstripping Accessories & options page for details.

Finishes:

BK Black
BR Brown
CL Clear
GY Gray
WH White
B Architectural mill finish bronze
Z Mill finish Zinc

Options:

PSA Pressure-sensitive adhesive
ZAG Anti-ligature gasketing

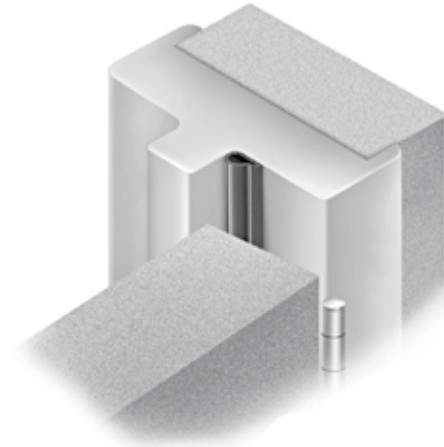
Note:

See door manufacturer specifications for minimum required clearance between door and frame. Most models shown are available in neoprene (N) or silicone (S). Both materials are self-extinguishing and non-staining.

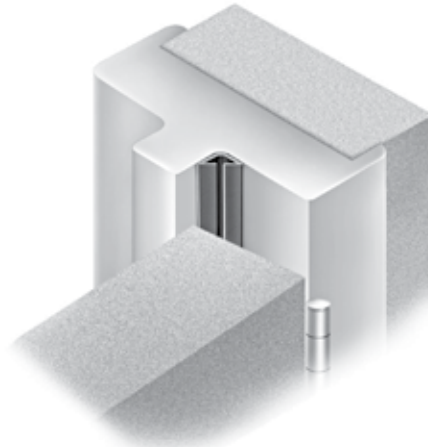
Weatherstripping

Self-adhesive weatherstripping

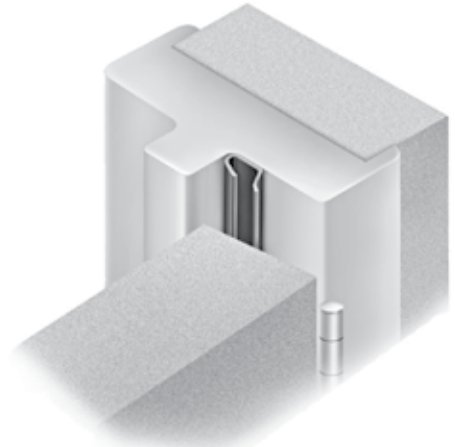
Solid neoprene and silicone seals



188 /488

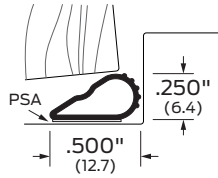


8144



8042

188S/188FS/188BIO

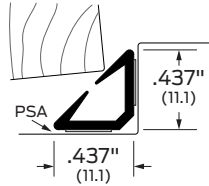


Material/ Finishes:	Options:	ANSI/BHMA:
S: BK, BR, CL, GY, WH	ZAG	188S R0E151
FS: BK	ZAG	188FS R0U154
BIO: BR	ZAG	-



S: PSA standard. 20-minute fire rating.
 FS: Intumescent rubber for fire and smoke protection. PSA standard. 45-minute fire rating.
 BIO: BioWall antimicrobial rubber. PSA standard.

8144S/8144FS

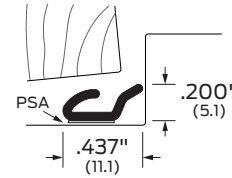


Finishes:	Options:	ANSI/BHMA:
S: BK, WH	ZAG	8144S R0E154
FS: BK	ZAG	8144FS R0U154



S: PSA standard.
 FS: Intumescent rubber for fire and smoke protection. PSA standard.

8042S

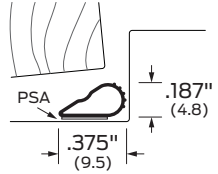


Finishes:	Options:	ANSI/BHMA:
BK	ZAG	8042S R0E154



PSA standard.

488S/488FS/488BIO

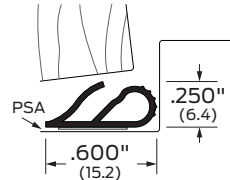


Material/ Finishes:	Options:	ANSI/BHMA:
S: BK, BR, CL, GY, WH	ZAG	488S R0E154
FS: BK	ZAG	488FS R0U154
BIO: BR	ZAG	-



S: PSA standard.
 FS: Intumescent rubber for fire and smoke protection. PSA standard.
 BIO: BioWall antimicrobial rubber. PSA standard.

8145S

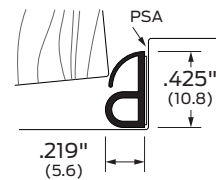


Finishes:	Options:
BK	ZAG



PSA standard.

824N



Finishes:	Options:	ANSI/BHMA:
BK	ZAG	824N R0B154



PSA standard.

See Weatherstripping Accessories & options page for details.

Finishes:

BK	Black
BR	Brown
CL	Clear
GY	Gray
WH	White
B	Architectural mill finish bronze
Z	Mill finish Zinc

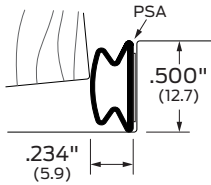
Options:

PSA	Pressure-sensitive adhesive
ZAG	Ligature-resistant gasketing

Self-adhesive weatherstripping

Solid neoprene and silicone seals (cont.)

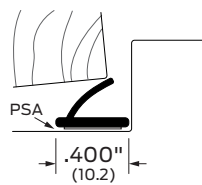
8216S



Finishes: BK Options: ZAG

PSA standard.

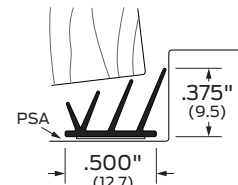
117S



Finishes: BK Options: ZAG ANSI/BHMA: 117S R0E154

PSA standard.

8150S

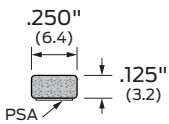


Finishes: BK Options: ZAG

PSA standard.

Closed cell sponge neoprene seals

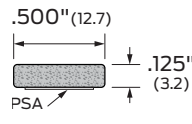
8172N



Finishes: BK Options: ZAG ANSI/BHMA: 8172N R0C155

PSA standard.

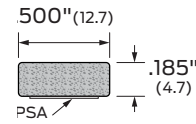
8770N



Finishes: BK Options: ZAG ANSI/BHMA: 8770N R0C155

PSA standard.

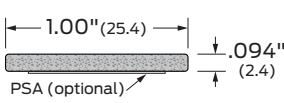
312N



Finishes: BK Options: ZAG ANSI/BHMA: 312N R0C155

PSA standard.

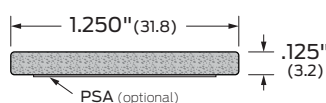
8780N



Finishes: BK Options: PSA, ZAG ANSI/BHMA: 8780N R0C155

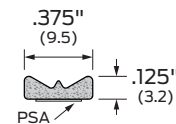
Mullion seal

139N



Finishes: BK Options: PSA, ZAG

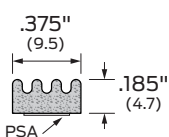
826N



Finishes: BK Options: ZAG ANSI/BHMA: 826N R0C155

PSA standard.

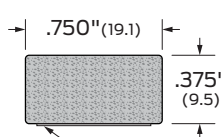
926N



Finishes: BK Options: PSA, ZAG ANSI/BHMA: 926N R0C155

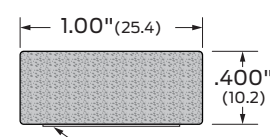
PSA standard.

318N



Finishes: BK Options: PSA, ZAG

3708N



Finishes: BK Options: PSA, ZAG

See Weatherstripping Accessories & options page for details.

Finishes:

BK Black
BR Brown
CL Clear
GY Gray
WH White
B Architectural mill finish bronze
Z Mill finish Zinc

Options:

PSA Pressure-sensitive adhesive
ZAG Ligature-resistant gasketing

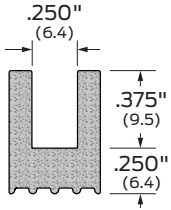
Weatherstripping

Self-adhesive weatherstripping

Closed cell sponge neoprene seals (cont.)

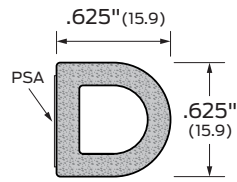


2070N



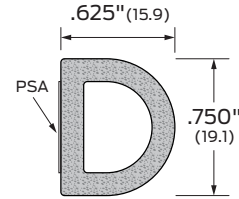
Finishes:
BK

810N



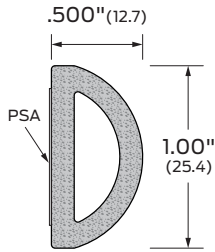
Finishes: Options:
BK ZAG
PSA standard.

811N



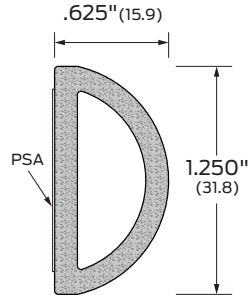
Finishes: Options:
BK ZAG
PSA standard.

812N



Finishes: Options:
BK ZAG
PSA standard.

813N

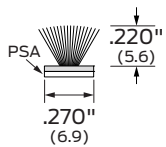


Finishes: Options:
BK ZAG
PSA standard.



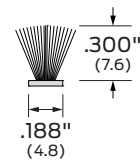
Pile brush seals

137P



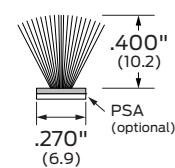
Finishes:
BK, GY
Also suitable for glass door application -- see Specialized Solutions. PSA standard.

8136P



Finishes:
GY

34P



Finishes: Options:
BK, GY PSA

See Weatherstripping Accessories & options page for details.

Finishes:

BK Black
BR Brown
CL Clear
GY Gray
WH White
B Architectural mill finish bronze
Z Mill finish Zinc

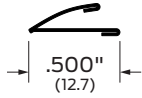
Options:

PSA Pressure-sensitive adhesive
ZAG Ligature-resistant gasketing



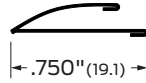
Weatherstripping for doors and windows

Cushion-spring seals for wood doors and frames

18

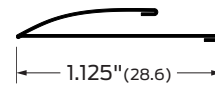
Finishes: ANSI/BHMA:
B 18B R1K155
BHMA
CERTIFIED

34 gauge bronze spring.

19

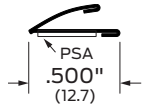
Finishes: ANSI/BHMA:
B 19B R1K155
BHMA
CERTIFIED

34 gauge bronze spring.

19W

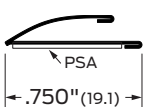
Finishes: ANSI/BHMA:
B 19WB R1K155
BHMA
CERTIFIED

34 gauge bronze spring.

118

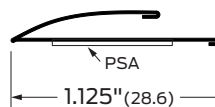
Finishes: ANSI/BHMA:
B 118B R1K155
BHMA
CERTIFIED

34 gauge bronze spring. PSA Standard.

119

Finishes: ANSI/BHMA:
B 119B R1K155
BHMA
CERTIFIED

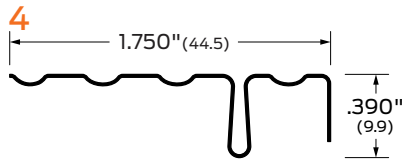
34 gauge bronze spring. PSA Standard.

119W

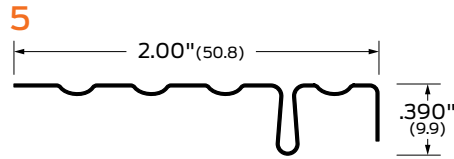
Finishes: ANSI/BHMA:
B 119WB R1K155
BHMA
CERTIFIED

34 gauge bronze spring. PSA Standard.

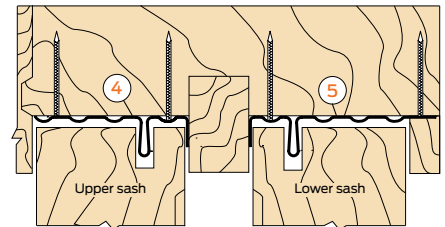
Jamb seals for double-hung wood windows



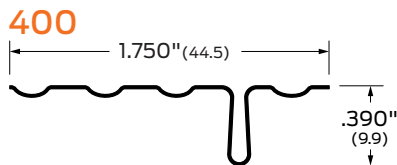
Finishes:
B, Z



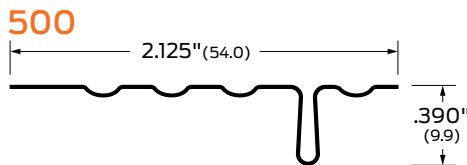
Finishes:
B, Z



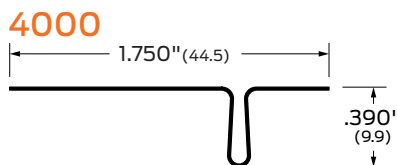
JAMB SECTION



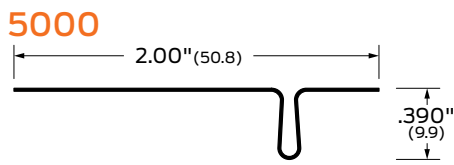
Finishes:
B, Z



Finishes:
B, Z



Finishes:
B, Z



Finishes:
B, Z

See Weatherstripping Accessories & options page for details.

Finishes:

BK Black
BR Brown
CL Clear
GY Gray
WH White
B Architectural mill finish bronze
Z Mill finish Zinc

Options:

PSA Pressure-sensitive adhesive
ZAG Ligature-resistant gasketing

Note:

PSA models use highest-quality foam-based, double-sided tape.

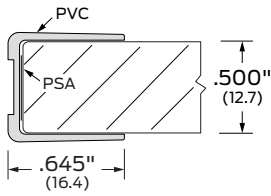
Weatherstripping

PSA Weatherstripping for glass doors

PVC glass edge protection for swinging and sliding doors



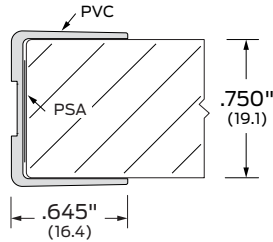
135



Finishes: ANSI/BHMA: **BHMA**
CL 135 R0Y716 CERTIFIED

For .450" to .500" (12.4mm) doors. PSA standard.

136



Finishes: ANSI/BHMA: **BHMA**
CL 136 R0Y716 CERTIFIED

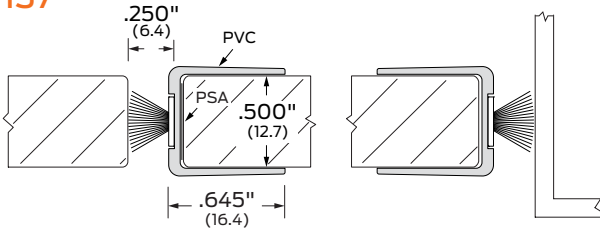
For .665" to .750" (19.1mm) doors. PSA standard.



For long door pulls see IVES catalog

Poly pile seals with PVC and polycarbonate housings – for swinging and sliding doors

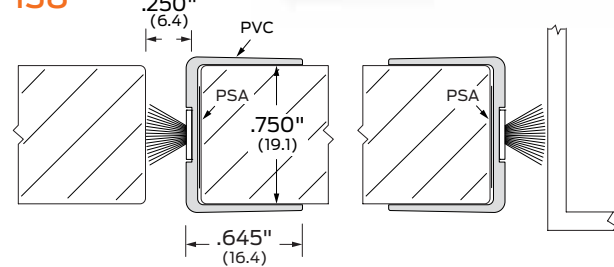
137



Finishes: ANSI/BHMA: **BHMA**
CL 135 R0F716 CERTIFIED

For .450" to .500" (12.4mm) doors. Clear housing with gray pile brush. PSA standard.

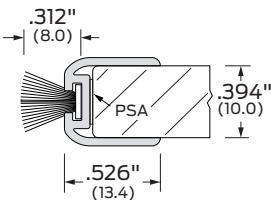
138



Finishes: ANSI/BHMA: **BHMA**
CL 138 R0F716 CERTIFIED

For .655" to .750" (19.1mm) doors. Clear housing with gray pile brush. PSA standard.

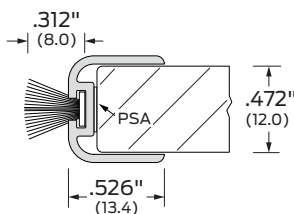
8136



Finishes: ANSI/BHMA: **BHMA**
CL 8136 R0F716 CERTIFIED

For .325" to .394" (10mm) thick doors. Clear housing with gray pile brush. PSA standard.

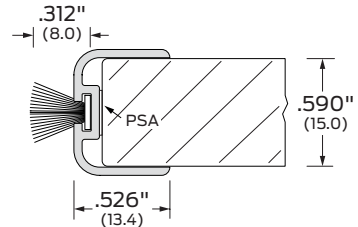
8137



Finishes: ANSI/BHMA: **BHMA**
CL 8137 R0F716 CERTIFIED

For .425" to .472" (12mm) thick doors. Clear housing with gray pile brush. PSA standard.

8138



Finishes: ANSI/BHMA: **BHMA**
CL 8138 R0F716 CERTIFIED

For .535" to .590" (15mm) thick doors. Clear housing with gray pile brush. PSA standard.

See Weatherstripping Accessories & options page for details.

Finishes:

BK Black
BR Brown
CL Clear
GY Gray
WH White
B Architectural mill finish bronze
Z Mill finish Zinc

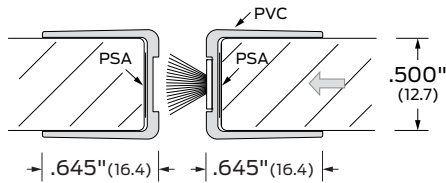
Options:

PSA Pressure-sensitive adhesive
ZAG Ligature-resistant gasketing

PSA Weatherstripping for glass doors

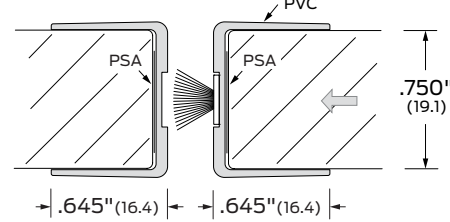
Edge protection for glass sliding doors

135/137



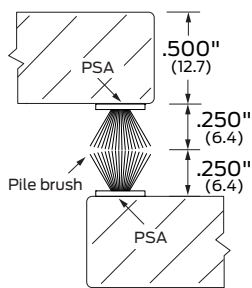
PVC housing and poly pile brush seal for .500" (12.4mm) doors. PSA standard.

136/138



PVC housing with neoprene seal. PSA standard. Min door gap .250", max door gap .340"

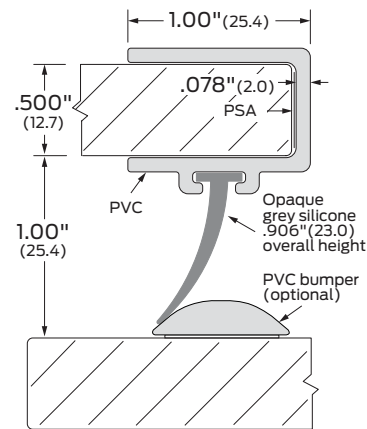
137P



Finishes:
BK, GY

Poly pile brush seal for .500" (12.4mm) doors.
PSA standard.

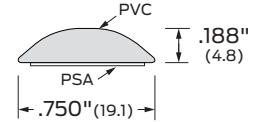
9137



Finishes: ANSI/BHMA: 9137 ROE716 BHMA 9137

For .500" (12.4mm) doors. Application with #9131 PVC bumper.
PSA standard. Min door gap .500", max door gap 1" when used without bumper or 1.2" when used with 9131 bumper.

9131

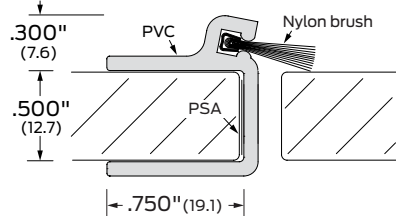


Finishes:
CL

PVC bumper, PSA standard.

Astragals for swinging doors

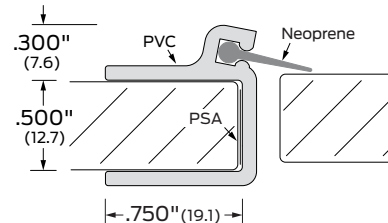
133



Finishes:
CL

PVC housing with black nylon brush. PSA standard. Min door gap .125", max door gap .250"

134



Finishes: ANSI/BHMA: 134 ROB716

PVC housing with neoprene seal. PSA standard. Min door gap .125", max door gap .250"

See Weatherstripping Accessories & options page for details.

Finishes:

BK	Black
BR	Brown
CL	Clear
GY	Gray
WH	White
B	Architectural mill finish bronze
Z	Mill finish Zinc

Options:

PSA	Pressure-sensitive adhesive
ZAG	Ligature-resistant gasketing

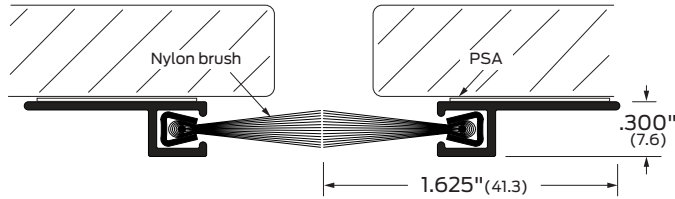
Weatherstripping

PSA Weatherstripping for glass doors

Glass door meeting stiles—surface mounted self-adhesive, both doors active



8192

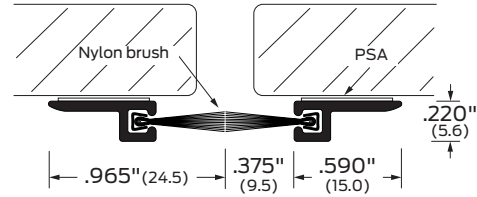


Finishes: AA, BK, D, G **Options:** PSA **ANSI/BHMA:** 8192AA-PSA, 8192BK-PSA, 8192D-PSA, 8192G-PSA R3A735



Min door gap .375", max door gap 1"

8193

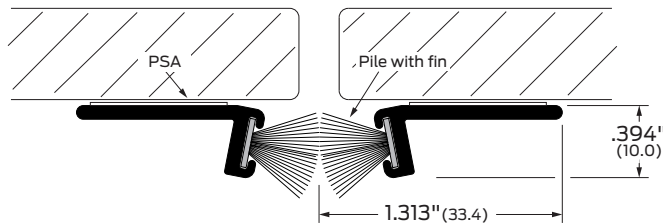


Finishes: AA, BK, D, G **Options:** PSA **ANSI/BHMA:** 8193AA-PSA, 8193BK-PSA, 8193D-PSA, 8193G-PSA R3A735



Min door gap .250", max door gap .700"

98

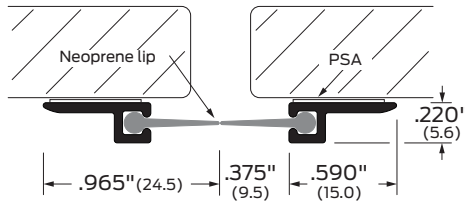


Finishes: A, BK, D, G **Options:** PSA **ANSI/BHMA:** 98AA-PSA, 98BK-PSA, 98D-PSA, 98G-PSA R3F735



Min door gap .250", max door gap .625"

8194



Finishes: AA, BK, D, G **Options:** PSA **ANSI/BHMA:** 8194AA-PSA, 8194BK-PSA, 8194D-PSA, 8194G-PSA R3B735



Min door gap .250", max door gap .700"

See Weatherstripping Accessories & options page for details.

Finishes:

AA Aluminum clear anodized
BK Aluminum black anodized
D Aluminum dark bronze anodized
G Aluminum gold anodized

Options:

PSA Pressure-sensitive adhesive
ZAG Ligature-resistant gasketing

Note:

PSA models use highest-quality foam-based, double-sided tape.



Solutions and specialty products

Door sealing systems



Solutions and specialty products

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Air control systems**Replacement rubber reference chart**

Zero solutions

When presented with a challenging application, turn to Zero for solutions designed to perform together for optimal results.

Piecing a solution together across multiple product and manufacturers adds time, complexity and risk. Instead, Zero offers proven solutions for a variety of applications, including: sound control, fire and smoke seals, flood barriers to ADA access systems and more.

- **Fire and smoke seal:** When a positive pressure rating is needed, turn to Zero intumescent seals that are self-extinguishing and flame retardant
- **Sound control:** For single and pairs of doors, Zero offers STC rated sound traps to improve the acoustical performance of your facility
- **ADA access:** For accessible openings Zero offers ADA access systems that minimize opening and closing force and meet ADA threshold height requirements
- **Flood barrier:** Zero's solution for flood prone areas protects from water ingress with a shield that blocks incoming flood waters

For your piece of mind, look to Zero for time proven specialty solutions designed to work together. Zero's commitment to quality and reliability ensure, that at critical moments, the systems you depend on to protect your building and its occupants will perform as intended.



Intumescent solutions



Positive pressure fire solutions for doors

ZERO's many years of leadership and innovations in developing fire and smoke seals for international and U.S. positive pressure code requirements have produced top-quality components and engineered gasketing systems that meet the highest standards of design and life safely. Our expertise in intumescent technology provides special value for the entire building team spanning a wide range of fire protection applications.

Zero's positive pressure seals are tested and listed according to U.S. listing agencies' classifications for Category G edge sealing systems and Category H smoke and draft control systems. (See listing at right for category definitions.) Category G edge seals are required for use on Category B wood core doors. Category H smoke seals are required for all positive-pressure doors carrying "S" labels.

Our intumescent material is used in OEM Category A doors to eliminate the need for add-on seals to achieve positive-pressure ratings. Smoke seals may still be required.

Products tested for fire and smoke are identified in our catalog by these symbols:



Fire-rated



Smoke-rated

Testing and compliance

U.S.		International	
UL 10B	Standard for fire tests of door assemblies	CAN/ULC-S104-10	Canadian standard method for fire tests of door assemblies.
UL 10C	Standard for positive pressure fire tests of door assemblies	International Standards Organization ISO 3008 2007	Fire-resistance tests - door and shutter assemblies
UL 1784	Standard for air leakage tests of door assemblies and other opening protectives.	British standard institute BS 476-PART 22 1987	Methods for determination of the fire resistance of non-load bearing elements of construction
IBC 2018	International building code	British standard institute BS 476-PART 31 1983	Methods for measuring smoke penetration through doorsets and shutter assemblies
NFPA 105	Standard for the installation of smoke door assemblies	BS EN 1634	Fire-resistance tests for door and shutter assemblies
NFPA 252	Standard methods of fire tests of door assemblies	Building and regulatory test Australia / New Zealand AS 1530.4	Fire resistance test

U.S. Positive pressure testing definition of listing categories

- CATEGORY A**
Doors - No additional edge-sealing system required
 This category includes doors that do not require the use of any intumescent in either the frame or the door. It also includes doors evaluated with intumescent incorporated into the edge of the door by the manufacturer. Category A doors are eligible to bear the "S" label for Smoke & Draft Control assemblies if a listed Category H "Smoke & Draft Control Gasket" has been applied to the assembly.
- CATEGORY B**
Doors - Additional edge-sealing system required
 This category includes doors that require add-on intumescent sealing systems either surface-applied or built into the frame in order to meet positive-pressure fire test requirements. Category B doors are eligible to bear the "S" label for Smoke & Draft Control assemblies if a listed Category H "Smoke & Draft Gasket" has been applied to the assembly.
- CATEGORY G**
Edge-sealing systems
 This category includes systems that are surface-applied (such as kerf applied, adhesive backed or mechanically attached) to frames or doors. It includes meeting edge seals for use in pair and double-egress assemblies.
- CATEGORY H**
Smoke and draft control gasketing
 This category includes gasket systems that are surface-applied (such as kerf applied, adhesive backed or mechanically attached) to frames or doors. It includes gasketing for the meeting edge for use in pair and double-egress assemblies.

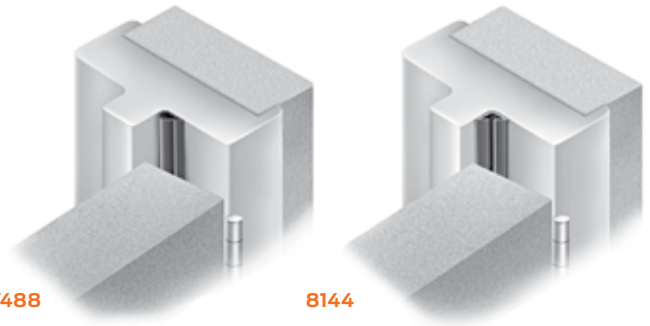
NOTE: This category covers gasket systems that have been evaluated for use in positive-pressure-rated assemblies but do not "provide" an edge-sealing system to the opening (see Category G).



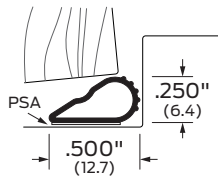
Intumescent solutions

Category G and Category H seals

Our extruded, surface-applied fire and smoke seals are engineered for improved performance and shelf life. These self-extinguishing, flame-retardant seals are formulated with a proprietary chemistry using silicone and intumescent.



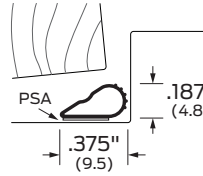
188FS



Finishes: BK Options: ZAG ANSI/BHMA: 188FS-PSA-BK ROU154

Intumescent rubber for fire and smoke protection. PSA standard. 45-minute fire rating.

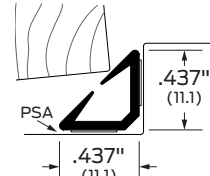
488FS



Finishes: BK Options: ZAG ANSI/BHMA: 488FS-PSA-BK ROU154

Intumescent rubber for fire and smoke protection. PSA standard.

8144FS



Finishes: BK Options: ZAG ANSI/BHMA: 8144FS-BK ROU154

Intumescent rubber for fire and smoke protection. PSA standard.

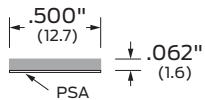
Head & jamb FS3003 intumescent seals

Intumescent fire seals for use where smoke and draft control is not required. Can be mortised into wood doors or frames, or into edge strips. Wide range of choices tested to positive pressure standards, including UL 10C and BS 476-Part 22 1987.

Available in black color. Supplied in 8 feet (2.4m) coil.

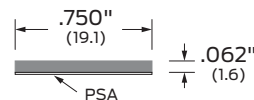


3062500PSA

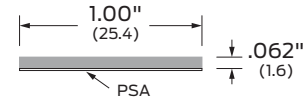


Provides 30 minutes fire resistance. Two parallel seals can provide 60 minutes fire resistance in hardwood constructions.

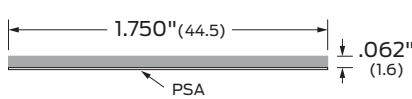
3062750PSA



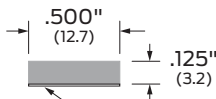
30621000PSA



30621750PSA

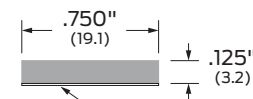


3125500PSA



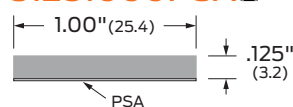
Suitable for softwood constructions or where the gap between the door and the frame is greater than usual.

3125750PSA



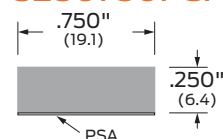
Provides 60 minutes fire resistance. Can be notched to fit around hinges.

31251000PSA

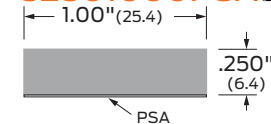


Larger seal helps control door distortion. May also be used between the door frame and masonry.

3250750PSA



32501000PSA



Solutions and specialty products

Intumescent technology & firestopping solutions



Intumescent material definitions and physical properties

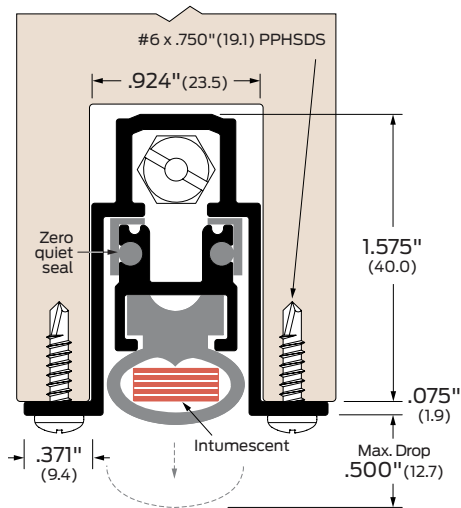
	FS3003	FS4004
Activation Temperature	350°F (176°C)	550°F (288°C)
Expansion volume	16-18 X	80 X
Expansion pressure	27 PSI (.0187 N/mm)	131 PSI (.09 N/mm)
Multi or controlled directional	✓	✓
Stability after expansion	Very good	Poor
Char	Soft & fluffy	Fluffy
Flame-resistant	✓	✓
Moisture-resistant	✓	✓
Chemically inert /paintable	✓	✓
Non-carcinogenic	✓	✓
Long-life (no deterioration)	✓	✓
Odor-free	✓	✓
Color – standard	Black	Red

Specifications:

Stock Sizes: **Thickness** .062"(1.6), .125"(3.2), .250"(6.4)
Width .375"(9.5), .500"(12.7), .750"(19.1), 1.00"(25.4), 1.75"(44.5), 2.00"(50.8)

Intumescent automatic door bottoms

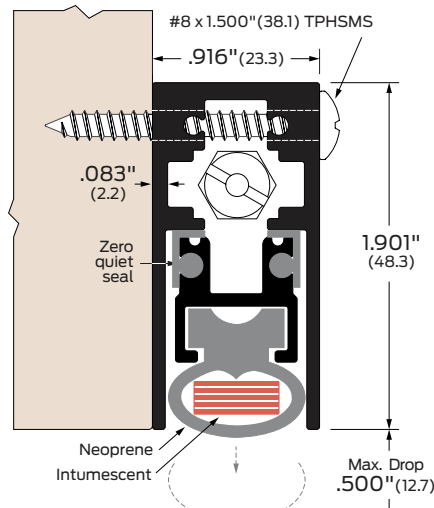
364FS



Finishes: AA
Options: Z49, PL
ANSI/BHMA: 364FS-AA R3B324
BHMA CERTIFIED

Mortised. Intumescent fire protection.

365FS



Finishes: AA, BK, D, G
Options: LK, PL, SEC
ANSI/BHMA: 365FS-AA, 365FS-BK, 365FS-D, 365FS-G R3B334
BHMA CERTIFIED

Surface-mounted application. Intumescent fire protection.

Finishes:

AA Clear Anodized Aluminum
BK Black Anodized Aluminum
D Dark Bronze Anodized Aluminum
G Gold Anodized Aluminum

Options:

Z49 Removable end cap
PL Pull out
SEC Torx security screws
LK Locking key



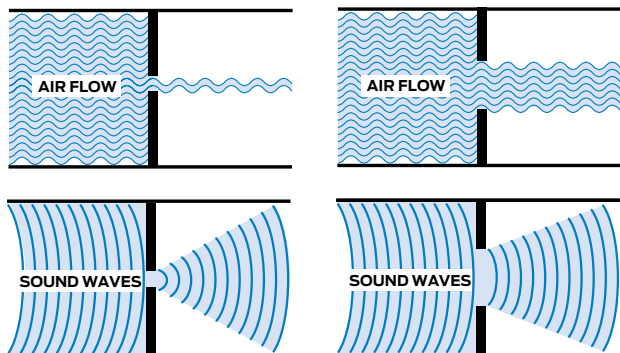
Sound control solutions

ZERO's SOUND TRAP sound control systems are solving sound problems in all types of facilities—including performing arts centers, recording studios, commercial offices, hospitals, schools, churches, hotels and apartment buildings, as well as industrial plants, embassies and government buildings.

Adjustable gasketing: key to our success

Nobody does sound control better than ZERO. Our sound seals and systems are built to withstand the stress of the installation process and perform reliably. We use advanced technology to master two critical challenges: creating an effective sound barrier at the perimeter of the door AND preventing gaps in that barrier for the life of the assembly.

Gaps in sound barriers are a major problem because sound travels through any opening with very little loss. While the amount of air flowing through a gap increases in proportion with the size of the gap, the size of the gap in a sound barrier does not matter. A small hole transmits almost as much sound as a much larger gap.



Because of this phenomenon, any unsealed gaps effectively cancel out the noise reduction benefits of even the highest-rated sound doors. To be effective, acoustical door assemblies require gasketing that provides a **complete, uninterrupted and air-tight** seal around head, jamb and sill. If all sides of the door are not sealed, the gasketing used will provide little or no sound-control value.

Imperfect alignment is a common cause of gaps even in newly installed gasketing. Problems can also surface later on as buildings shift and settle and doors cycle through changes in temperature and humidity. ZERO solves the problem efficiently with adjustable gasketing.

Models such as the **770 adjustable jamb-applied gasket** are designed to perform consistently over time. When clearances increase, a few turns of a screwdriver is all it takes to restore a sound-tight seal.

Proven solutions for sealing the gaps

Our featured SOUND TRAP gasketing systems can satisfy a wide range of commercial and industrial sound-control applications for single swinging doors – as well as provide privacy behind double doors for typical office applications.

Sound transmission class (STC) table

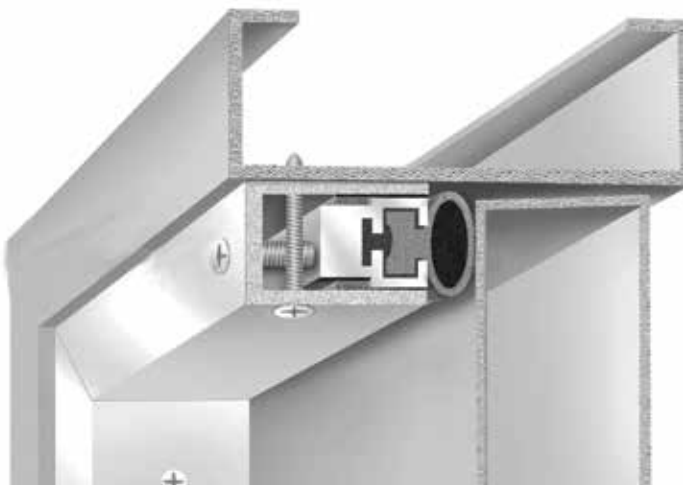
STC	Performance	Description
50 - 60	Excellent	Loud sounds heard faintly or not at all.
40 - 50	Very Good	Loud speech heard faintly but not understood.
35 - 40	Good	Loud speech heard but hardly intelligible.
30 - 35	Fair	Loud speech understood fairly well.
25 - 30	Poor	Normal speech understood easily and distinctly.
20 - 25	Very Poor	Low speech audible.

Sound Transmission Class (STC) ratings indicate the ability to prevent the transfer of sound from one area to another. For example, 12 inches of reinforced concrete would be rated at 56 STC, while 1/4" plate glass is 26 STC.

Zero sound trap systems high level rating

Gasketing system	Head & jamb	Threshold	Door bottom	STC Rating
STC 1	3708 & 119WB	564B	367	53 STC
STC 2	770 & 119WB	564B	367	52 STC
STC 3	770 & 119WB	656B	367	51 STC
STC 4	170 & 119WB	564B	367	51 STC
STC 5	485 & 119WB	565B	361	49 STC
STC 6	870 & 119WB	564B	365	49 STC

All systems tested with STC 55 Doors (rated as panels).



The integrity of the system, properly installed, is essential to its sound rating. ZERO guarantees the performance of SOUND TRAP systems in rated assemblies provided that other manufacturers' gasketing products are not combined with ZERO components.

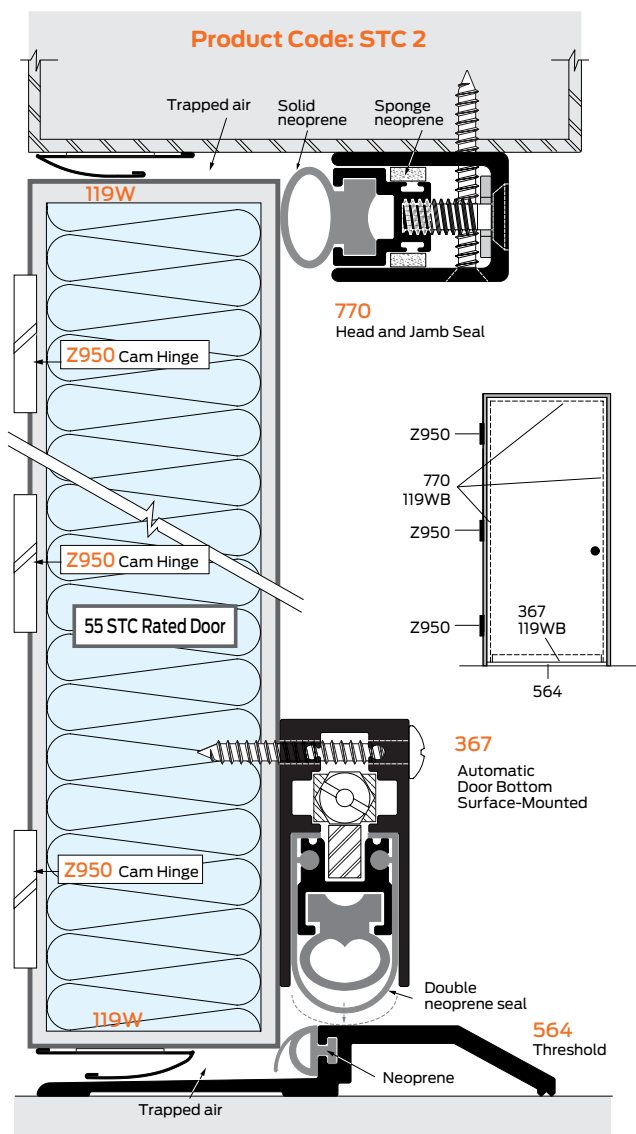
Solutions and specialty products

Sound control solutions – single door



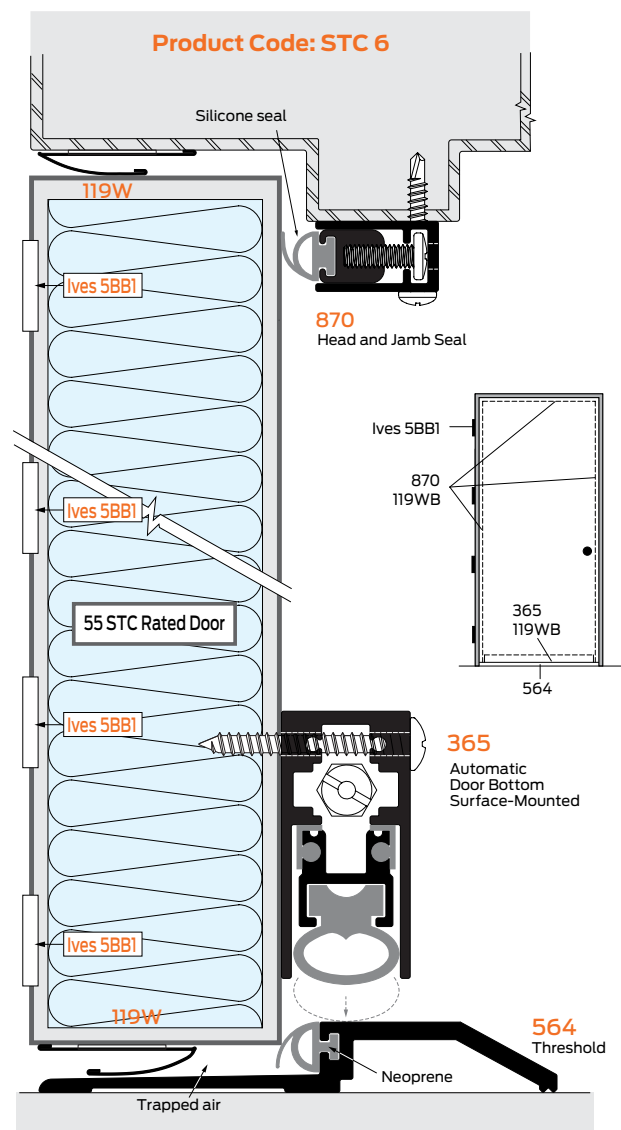
Sound trap 52 STC sealing system

Our SOUND TRAP 52 STC rated systems are designed for use with sound-rated single metal doors with a cased-opening frame. They provide an STC 52 rating when properly fitted with STC 55 or higher acoustical doors. That level of sound control means loud sounds will be heard only faintly, or not at all, on the opposite side of the door, which satisfies the typical needs of recording studios and performance halls. It is also suitable for office buildings and other commercial facilities that need to mute very loud noise originating from outside, such as the sound of aircraft overhead or heavy traffic nearby, as well as interior equipment noise. A metal frame **without a stop** is recommended in order to use the Model #770 adjustable head and jamb seal, which is an important component in this system.

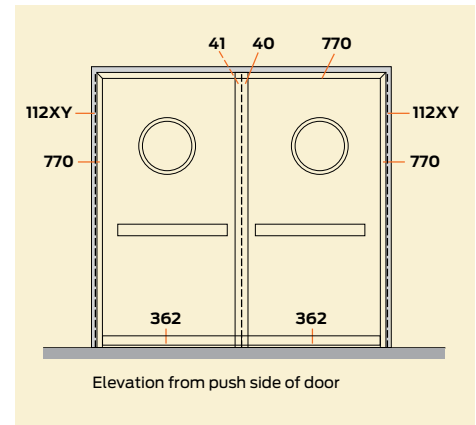
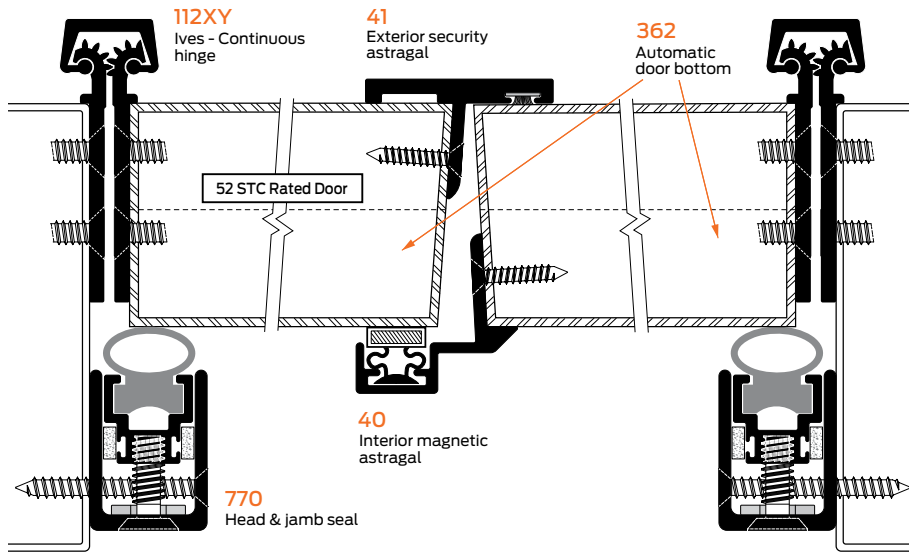


Sound trap 49 STC sealing system

SOUND TRAP 49 STC rated systems for single doors feature several alternative head and jamb seals designed for use with frame stops. The 49 STC value they provide means that loud speech will be heard only faintly and cannot be understood on the opposite side of the door. That level of acoustic performance provides very good sound control suitable for a variety of applications ranging from busy schools to multi-family residential buildings and any settings requiring private conversations, such as doctors' offices, counseling centers and churches. A metal frame **with a stop** is recommended.

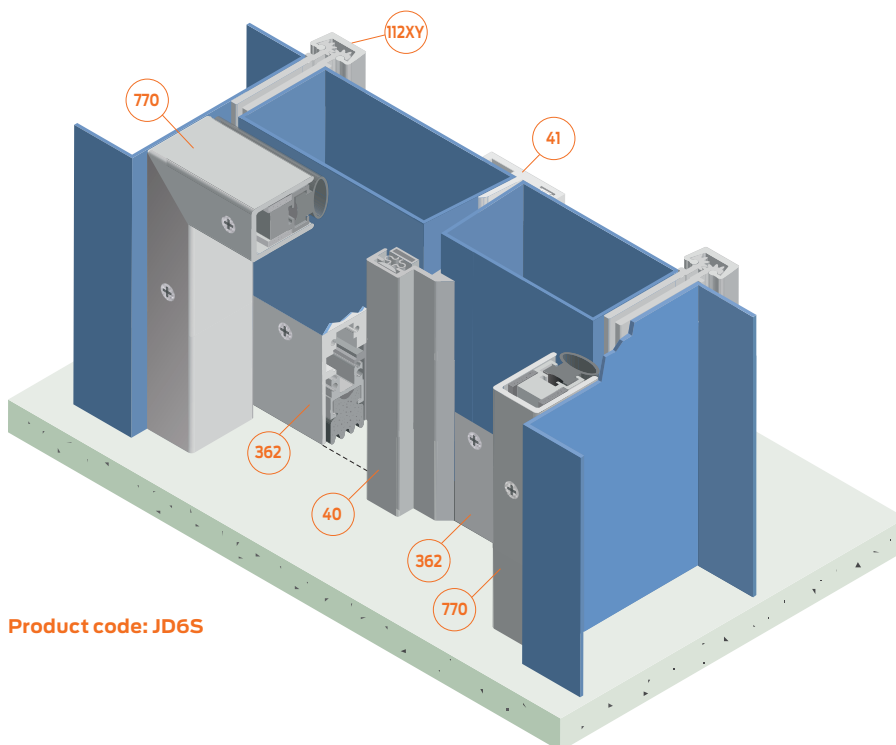


Sound control solutions – pairs systems



Sound trap system JD6S

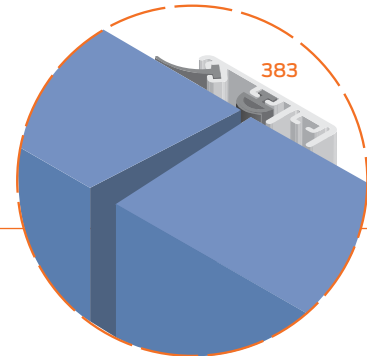
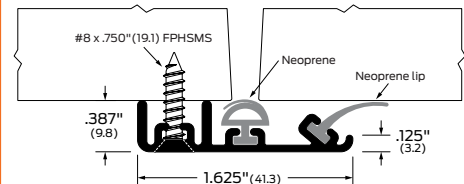
Pairs of doors pose additional challenges for sound control because there are more openings to seal. The need for a meeting stile means there will always be relatively more sound leakage through pair assemblies than with single doors. Properly fitted with STC 52 or higher acoustical doors, ZERO's **SOUND TRAP-PAIRS** system for metal doors achieves an office-friendly estimated STC rating of 41 with an optimal configuration that balances those limitations with appropriate, cost-effective technology.



Product code: JD6S

Alternative seal option to 40/41

For a pairs configuration with suitable wood doors, you need Model #383 astragals for the meeting stile. #383 provides three sets of seals to block sound: the neoprene bulb with extra "lip" of neoprene in the primary seal at the meeting edge, plus another neoprene "finger" for added sound cushioning against the active door.

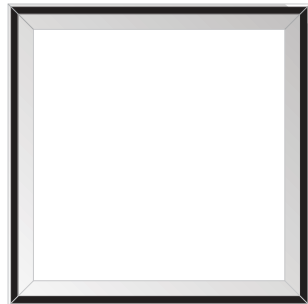


Solutions and specialty products

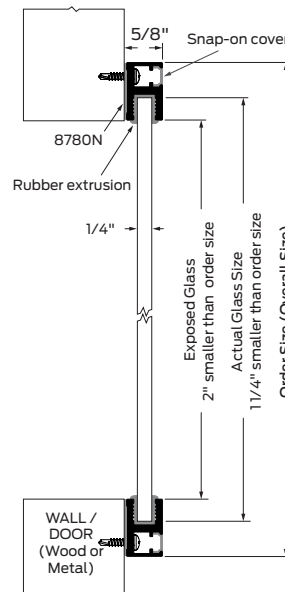
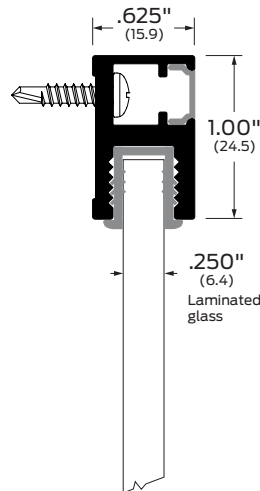
Sound control solutions

**8880 - Vision Lite for doors, walls and acoustical windows**

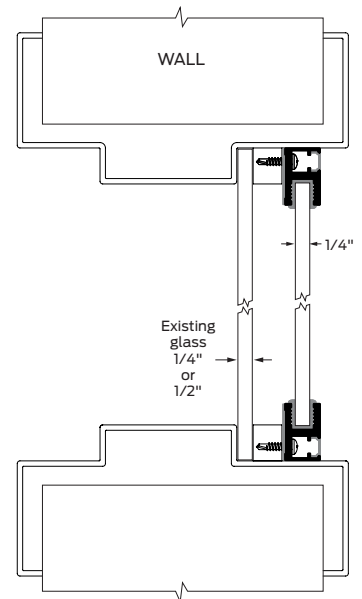
To increase sound rating for doors, walls and acoustical windows of any thickness. Used with 1/4" thick glass. (Glass sold separately.) Aluminum extrusion frame with concealed screws. Supplied with factory mitered corners.

8880

Finishes:
AA, BK, D, G



- **APPLICATION ON DOOR**
Surface mounted.



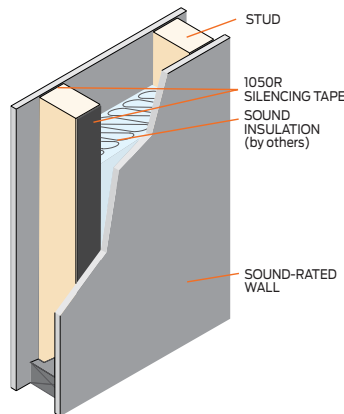
- **APPLICATION ON WINDOW**
Surface mounted on any edge of window frames.

Structural acoustics - floors and walls

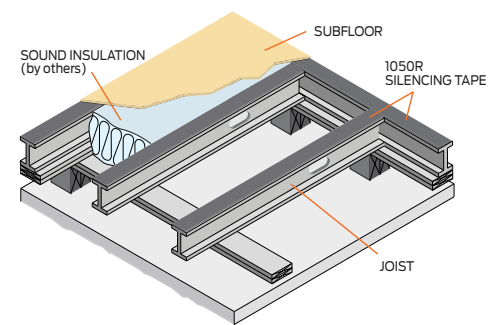
Sound-damping materials and products used to isolate or insulate structural elements in floors and walls perform a vital role in reducing vibrations to minimize sound transmission.

Structural silencing tape 1050R

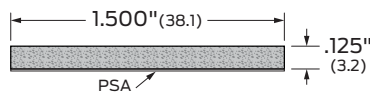
- Extruded low-density, high-elasticity neoprene rubber, self-adhesive one side.
- Absorbs and dampens vibrations.
- Designed for application to floor joists and wall studs and install as usual.
- Supplied in 75-foot coils.



- **APPLICATION ON WALL STUDS**



- **APPLICATION ON FLOOR JOISTS**

1050R

Finishes:
Grey

Finishes:

- AA** Clear Anodized Aluminum
- BK** Black Anodized Aluminum
- D** Dark Bronze Anodized Aluminum
- G** Gold Anodized Aluminum

Sound control systems

ZERO has designed and tested its systems against air, light, smoke, fire and sound to demonstrate the effectiveness of these products and materials. By specifying a complete "Control System," you are assured that the components installed for head, jamb and sill will perform properly together. All tests were performed in accordance with nationally accepted standards by independent laboratories.

Sound - single doors

System no.	Door rating	Type of door	Head & jamb	Door bottom	Threshold	STC
STC1	55	Metal	3708 + 119WB	367	564B	53
STC2	55	Metal	770 + 119WB	367	564B	52
STC3	55	Metal	770 + 119WB	367	656B	51
STC4	55	Metal	170 + 119WB	367	564B	51
STC5	55	Metal	485 + 119WB	361	565B	49
1T	52	Metal	770	367	564A	47
2T	52	Metal	870	361	565	44
2U	52	Metal	485	361	565	44
1R	51	Metal	770	361	565	44
4R	51	Metal	370	361	565	43
5S	52	Metal	328	361	565	42
5T	52	Metal	312	351	564	42
SU299	38	Wood	188S	None	564A	37
TR298	35	Wood	8144FS	253	1685R	35
LG302	36	Wood	188S	369	None	35

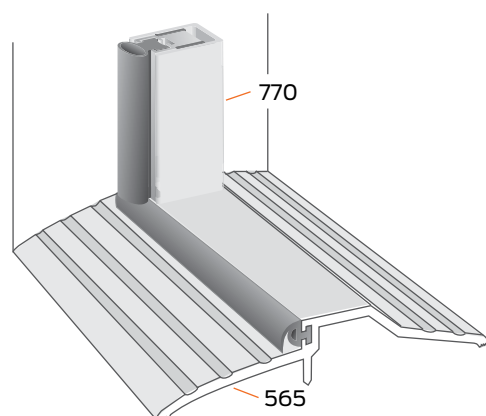
Sound - double doors

System no.	Door rating	Type of door	Head & jamb	Door bottom	Meeting stiles	STC
RM1	48	Metal	770	367	383/139/118B	47
JD6S		Metal	770	362	40	41
JD8S		Metal	475	362	156/56	36
AT4	37	Metal	188/119WB	564	383	36
AT5	37	Metal	485/119WB	564	383	35
AT7	37	Metal	485/119WB	839/544	383	35

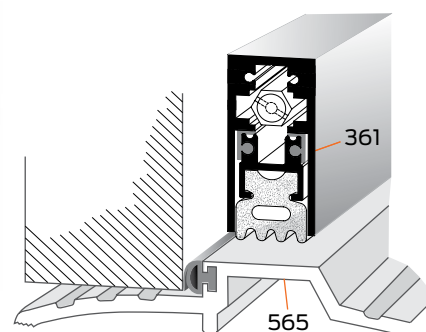
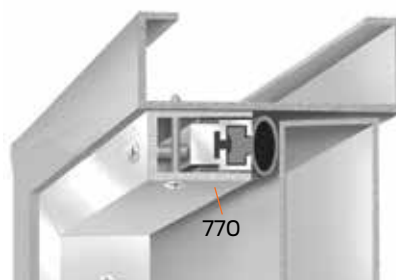
Applications

All types of openings with a sound-reduction requirement, including:

- High-performance sound blocking, such as recording and broadcast studios, theaters and concert halls, commercial industrial factories.
- Privacy and security needs, such as doctors' offices, corporate offices, school counseling offices, embassies and military.



System 1R



Solutions and specialty products



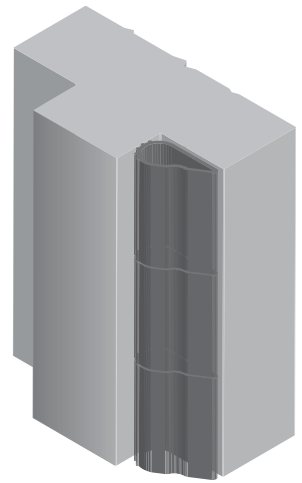
Specialty head and jamb protection

Ligature-resistant gasketing (ZAG option)

Zero offers a ligature-resistant option to prevent gasketing from being used for unintended purposes, including harming self or others. The rubber in our patented ligature-resistant gasketing is scored before insertion into aluminum extrusions. This allows the seal to still function normally for its specified purpose, but it will now break apart if removed from the housing or if any weight is placed on the seal.

Applications for ligature-resistant gasketing include correctional facilities and mental health facilities.

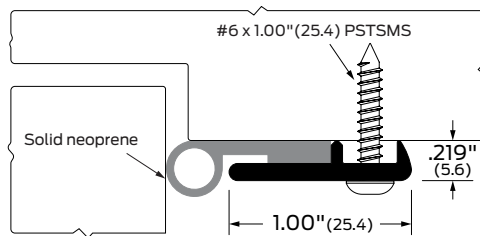
Gasketing ordered with this patented feature is installed as usual, with no special handling required. In addition to the applications shown below, the ligature-resistant option can be supplied on request with most other Zero gasketing. To order, add ZAG to the part number. All products with the ZAG option are supplied standard with Torx security screws for added security.



Applications

Correctional facilities, hospitals, psychiatric and mental health facilities.

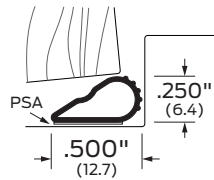
328 ZAG



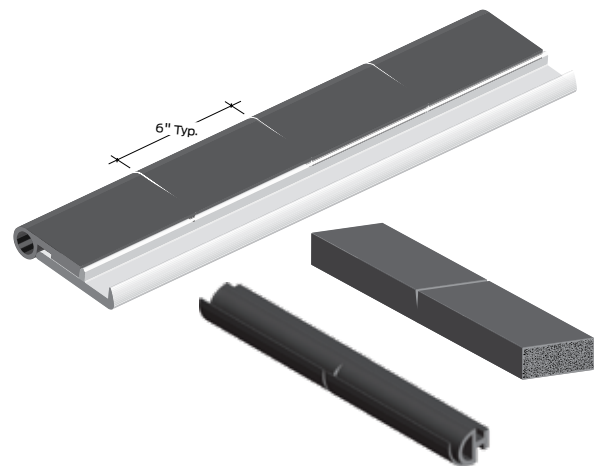
Finishes:
AA, B, BK,
D, G



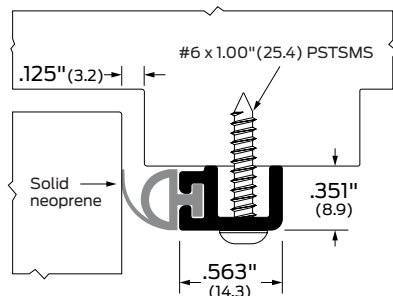
188 ZAG



Finishes:
BK, BR, CL, GY,
WH, FS, BIO



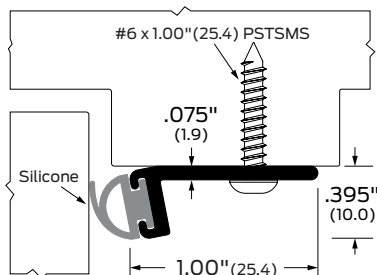
485 ZAG



Finishes:
A, BK, D, G



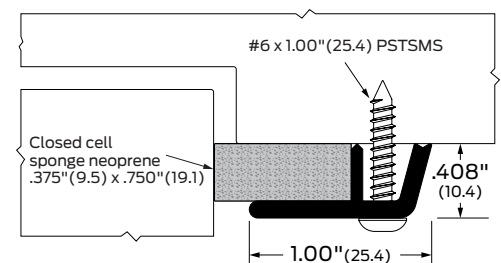
99 ZAG



Finishes:
A, BK, D, G



318 ZAG



Finishes:
AA, BK, D, G



Finishes:

BIO Antibacterial rubber white color
A Aluminum Mill Finish
AA Clear Anodized Aluminum
B Bronze
BK Black Anodized Aluminum
D Dark Bronze Anodized Aluminum

G Gold Anodized
S-BK Silicone, Black
S-BR Silicone, Brown
S-CL Silicone, Clear
S-GY Silicone, Gray
S-WH Silicone, White

Options:

ZAG Ligature-Resistant

Cam lift full mortise hinges

Cam lift full mortise hinges

Mortise-type cam hinges for use with sound-insulating doors utilizing acoustical seals. The cam action greatly improves the sealing characteristics along the door perimeter, lifting and lowering the door with the swing.

Available for right or left-hand swinging doors. Cam lift hinges will not bind door closures when doors are hung within accepted industry standards. (Tested with LCN 4041 Series original).

Finish: STST630 (US32D).

Part #	Door rating (1 1/2 pairs)	Screw size (metal doors)	Lift (180° opening)
Z955	Up to 200 lbs.	12-24 x 3/4" UC	3/16"
Z953	Up to 300 lbs.	12-24 x 3/4"	1/4"
Z950	Up to 500 lbs.	12-24 x 3/4"	5/16"
Z9500	Up to 900 lbs.	5/16-18 x 3/4"	5/16"



Z950ST
12-24 x 3/4"



Z955ST
12-24 x 3/4" UC



Z952ST
5/16-18 x 3/4"

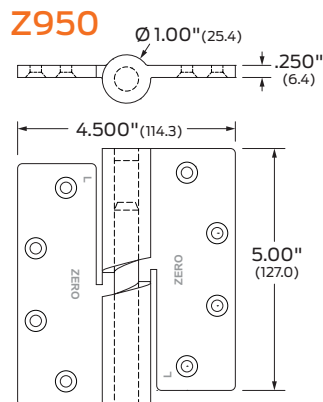


Z951ST
12 x 1 1/4" SMS

Hinge:	Stainless Steel US304
Pin:	Stainless Steel 420 J2
Type:	Mortise/ Handed - specify right or left hand
Clearance:	Minimum clearance at head of frame is 3/16". For doors greater than 1-3/4" clearance is 1/4"
Finish:	630 (US32D)
Note:	For Z950 and Z9500 screws must be engaged no less than .350" in ASTM A-36 steel reinforcement



Z950 L

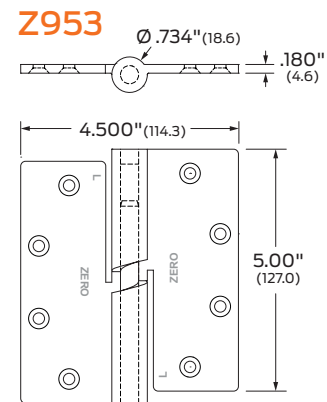


Finishes:
STST

Options:
L- Left Hand
R- Right Hand



Z953 L

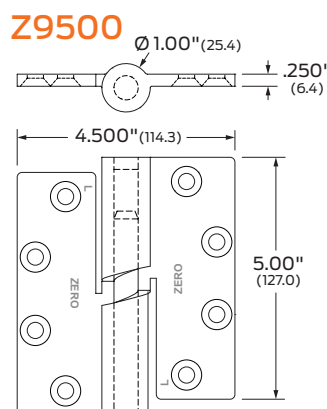


Finishes:
STST

Options:
L- Left Hand
R- Right Hand



Z9500 L

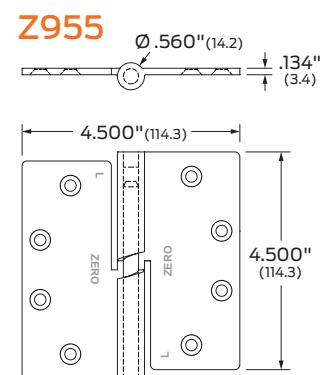


Finishes:
STST

Options:
L- Left Hand
R- Right Hand



Z955 L



Finishes:
STST

Options:
L- Left Hand
R- Right Hand



Solutions and specialty products

Finger guards



Finger guards

Hand and finger protection for heavy-duty industrial applications, child care, school safety, hospitals, and workplaces.

A commercial-quality, maintenance-free product. Aluminum and flexible rubber available in grey color.

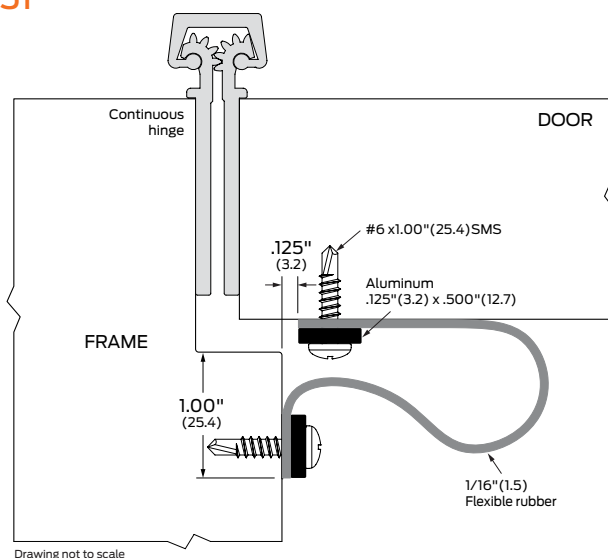
51A-90 (6.5" wide) For door opening up to 90°

51A-180 (8.5" wide) For door opening up to 180°

951 Cover for mortise type hinges



51

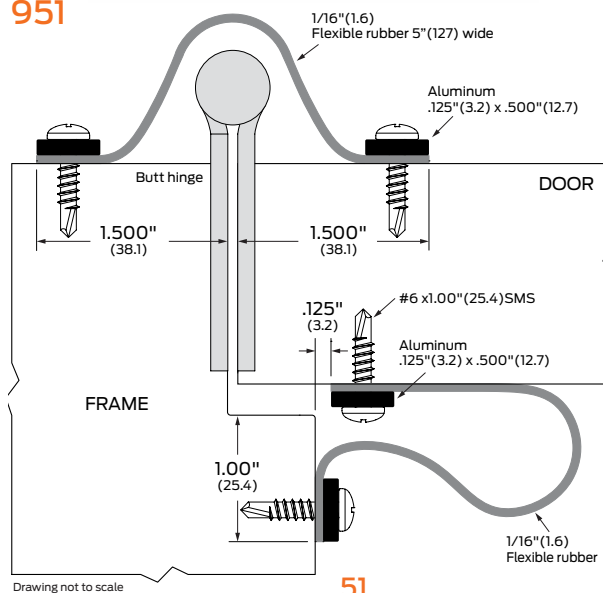


Finishes:
A, BK, D, G

Options:
SEC

Opening degree:
90, 180

951

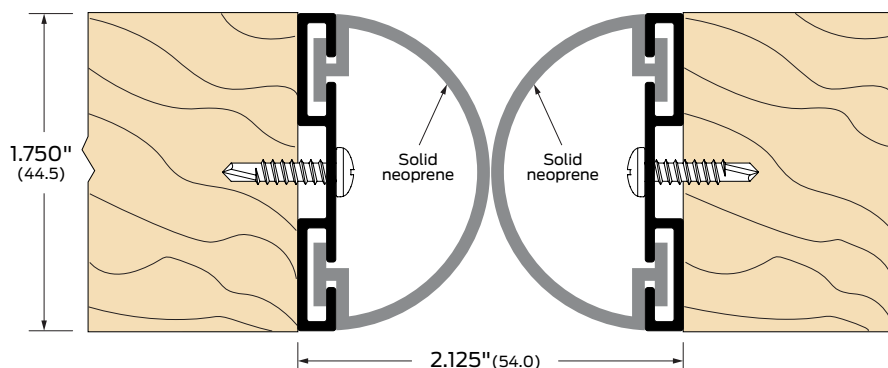


Finishes:
A, BK, D, G

Options:
SEC

51

72



Finishes:
A

Options:
SEC



Finishes:

A Aluminum Mill Finish
BK Black Anodized Aluminum
D Dark Bronze Anodized Aluminum
G Gold Anodized Aluminum

Options:

SEC Torx security screws



BioWall™ antibacterial gasketing

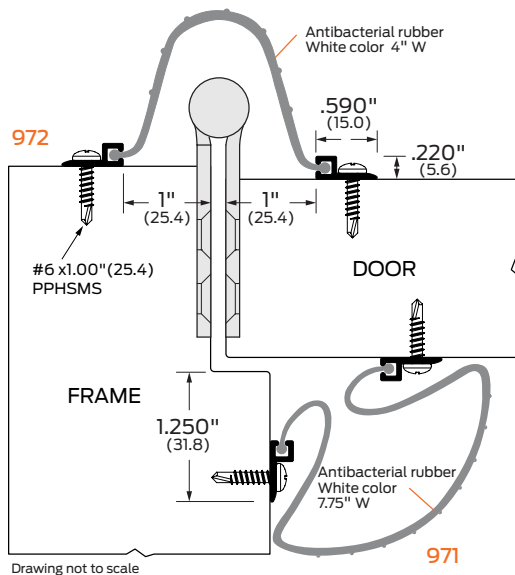
Zero developed **BioWall™ antibacterial** rubber in response to rising hygienic standards and increasing demand for practical, antimicrobial applications in many facilities. Applications range from hospitals, nursing homes and doctors' offices, to veterinary facilities, to schools. Wherever minimizing microbial exposures is crucial to occupant and visitor well-being, **BioWall** can help maintain a sanitary work environment.

Breakthrough technology. This non-toxic rubber inhibits and suppresses microbial growth and reproduction. It was formulated using revolutionary, non-toxic infusion technology, combined with proprietary extrusion technology, natural antimicrobial ingredients, and breakthrough synthetics. It provides long-lasting defense against bacteria, fungi, molds and other microorganisms.

Durable. Our technology provides natural resistance to abrasion, washing, and exposure to UV radiation and various chemicals. Zero BioWall antibacterial gasketing is designed to withstand surface wear and tear to maintain long-lasting antimicrobial protection.

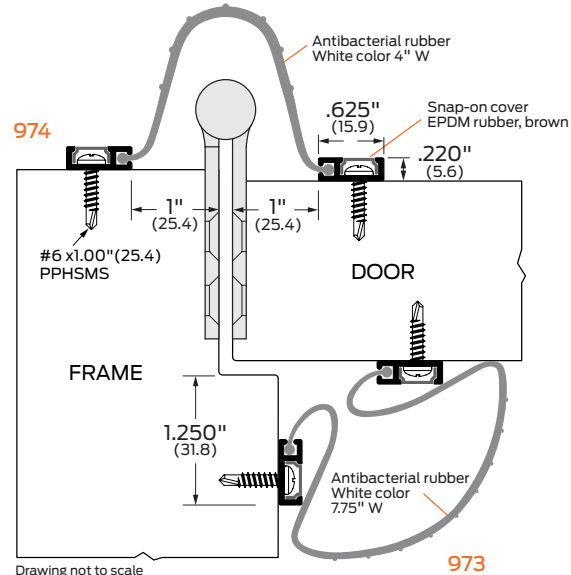


971 / 972 Bio



Finishes: A, BK, D, G
Options: SEC
Opening Degree: 90, 180

973 / 974 Bio



Finishes: A, BK, D, G
Options: SEC
Opening Degree: 90, 180

BioWall finger protection

- Antibacterial hand and finger protection for child care facilities, hospitals and nursing homes, doctors' offices, and other locations requiring highest standards of hygiene.
- Available in two versions. Mountings in models #973 and #974 are concealed with additional BioWall rubber for aesthetics and enhanced antibacterial protection.

Finishes:	Options:
A Aluminum Mill Finish	SEC Torx security screws
BK Black Anodized Aluminum	
D Dark Bronze Anodized Aluminum	
G Gold Anodized Aluminum	

Solutions and specialty products

ADA Access systems – safety products



ZERO's ADA Access Systems help solve the challenge of meeting the American Disability Act Requirements for access into public buildings. The components work together to minimize required door-opening and closing force and to meet threshold height requirements, and fully satisfy the ANSI, ADA standards.

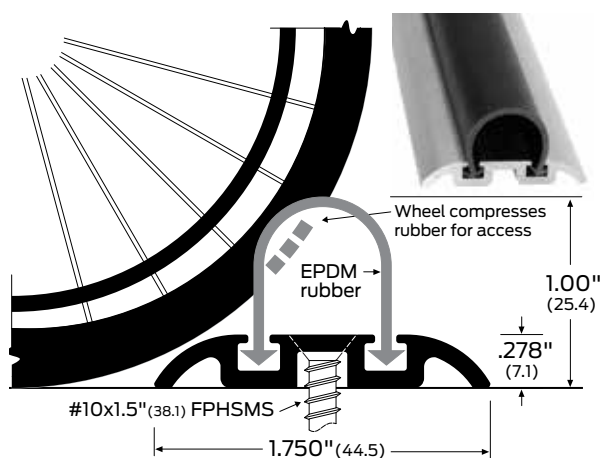
**American National Standard Institute (ANSI),
American With Disabilities Act (ADA),
ICC/ANSI A117.1-217**

Requirements are as follows:

- 1) Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.
Other doors:
 - (a) Interior hinged doors : 5 lbf (22.2N)
 - (b) Sliding or folding doors : 5 lbf (22.2N)
 These forces do not apply to the force required to retract latch bolts or disengage other devices that may hold the door in a closed position.
- 2) Thresholds at doorways shall be 1/2" (13 mm) high maximum for other types of doors. Changes in level of 1/4" (6mm) high maximum shall be permitted to be vertical. Changes in level between 1/4" (6mm) high minimum and 1/2" (13mm) high maximum shall be beveled with a slope not steeper than 1:2.

8452 Wheelchair accessible shower threshold

Designed for use when a shower must be accessible to a wheelchair. The rubber gasket keeps water in while allowing the wheel to pass over easily.



Finishes:
A, BK, D, G

Finishes:

A	Aluminum Mill Finish
AA	Clear Anodized
BK	Black Anodized Aluminum
D	Dark Bronze Anodized Aluminum
G	Gold Anodized Aluminum

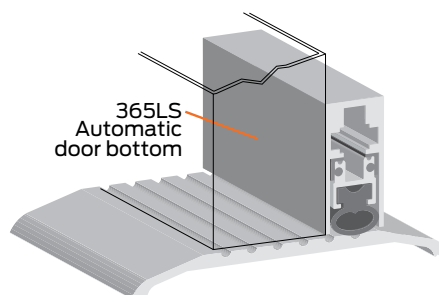
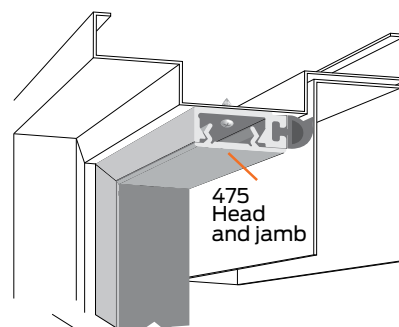
"Light spring" "LS" automatic door bottoms for ADA approved doors

350LS, 351LS, 364LS, 365LS, 366LS "LS" models require lower operating force. "LS" models are suitable for both sliding doors and swinging doors. Outside dimensions are unchanged from standard products.

Test door: 36" X 84" x 1-3/4"

Test results:		Opening force (lbs.)	Closing force (lbs.)
Test 1	475 Head and Jamb	1.75	7.90
Test 2	475 Head and Jamb 365LS Automatic Door Bottom	1.90	9.05
Test 3	Closing force with no seals	-	6.75

System ADA 1000



475 and 365LS - 1.9 lbs opening force



Flood barrier shield

Flood barrier shield for doors helps safeguard building contents

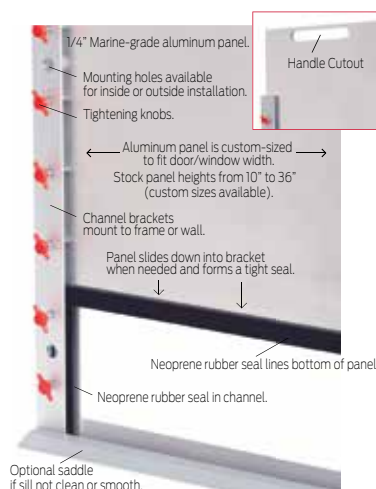
This removable barrier answers pleas from builders for help in protecting doors and building contents from water ingress in flood-prone areas. When water from heavy rain accumulates, the **Flood barrier shield** effectively blocks up to a foot or more of flood waters from permeating door or window openings.

Available in 10, 12, 20, 24, 30 and 36 inch high barriers (other sizes available upon request), the lightweight aluminum shield requires no tools for insertion into premounted vertical channels attached to either the door frame or adjacent walls. Widths up to 36" standard. Widths greater than 36" available as an engineering special.

The unit complies with guidelines of the Federal Emergency Management Agency (FEMA) and Federal Insurance Administration (FIA) for use on doors in flood-prone areas.

The key to the shield's impermeability is the use of closed cell sponge (CCS) neoprene rubber engineered by Zero to ensure a water-tight seal. The rubber lines the aluminum channel brackets and the bottom of the shield. The neoprene also compensates for gaps at the threshold.

Note: Aluminum panel insert is supplied 7/16" shorter than order width

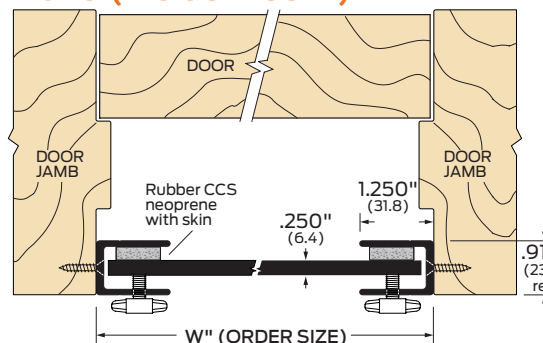


Flood barrier shield for doors

- 2070A - 10** 10" High
- 2070A - 20** 20" High
- 2070A - 24** 24" High
- 2070A - 30** 30" High
- 2070A - 36** 36" High

Each flood barrier shield is custom fabricated. Specify exact width needed and installation option required.

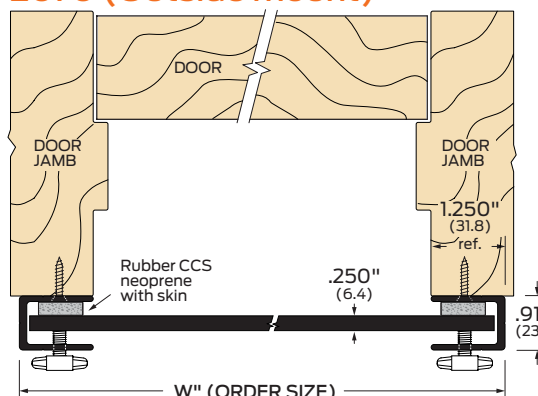
2070 (Inside mount)



SECTION A-A

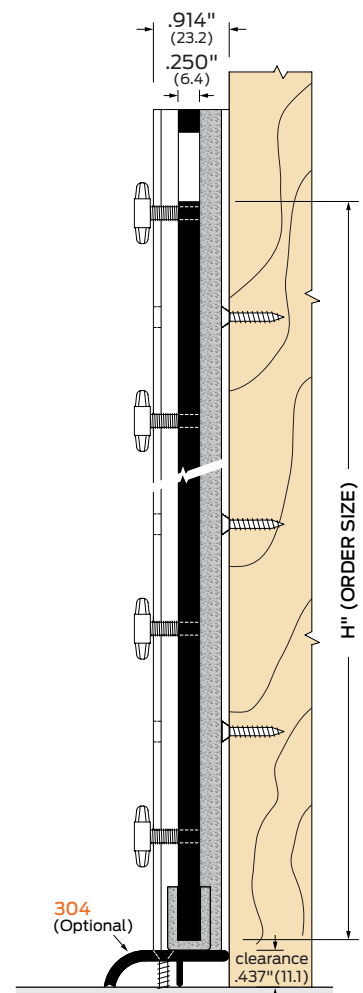
Installation option - inside mount

2070 (Outside mount)



SECTION A-A

Installation option - outside mount

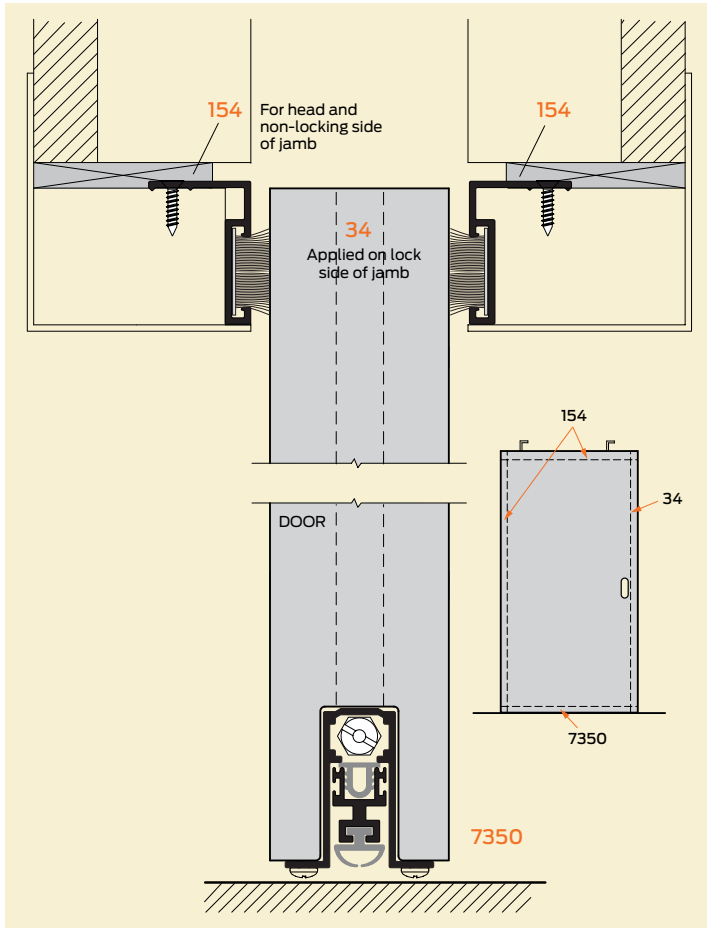


SECTION B-B

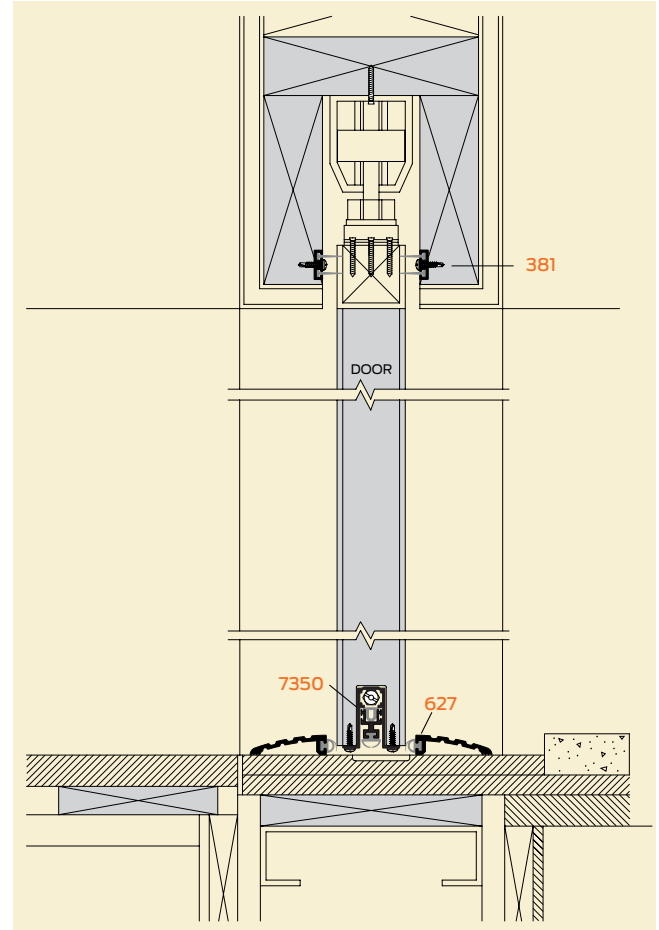
Installation option - outside mount

Sliding and pocket doors

Gasketing for sliding and pocket doors



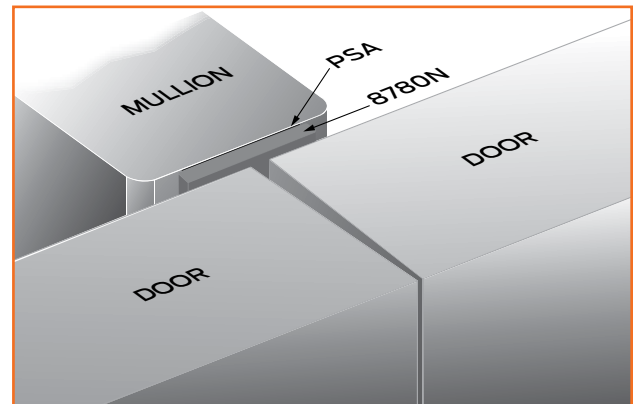
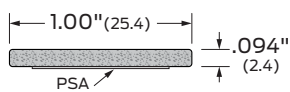
Gasketing for latching pocket doors



Seal for mullion application

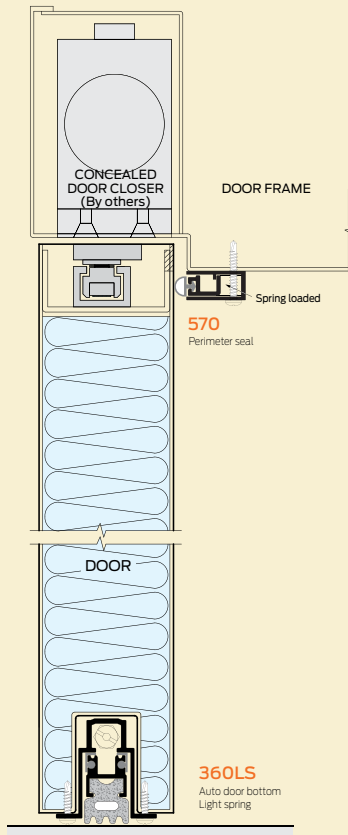
The new 8780 is a closed cell sponge neoprene strip 1" (25.4) wide x 3/32" (2.4) thick with self-adhesive tape for mounting directly to the face of the mullion at point of contact with closed doors.

8780N

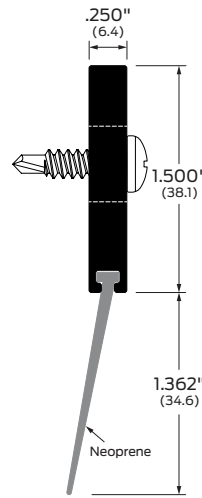


Heavy-duty overhead doors

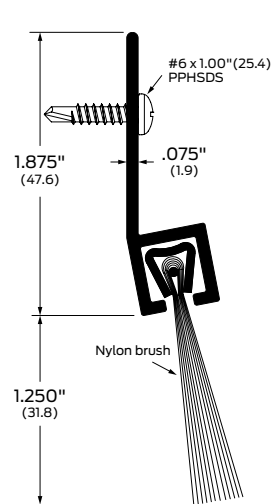
Non-latching door Gasketing for non-latching doors



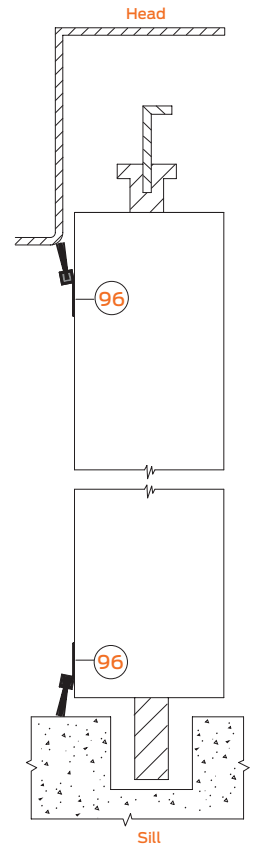
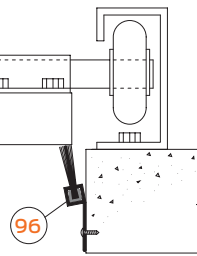
95



96

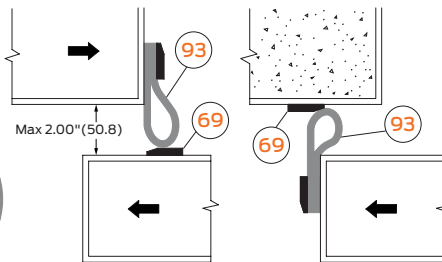
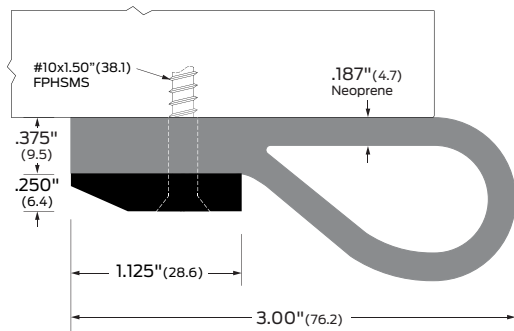


Jamb Section



93

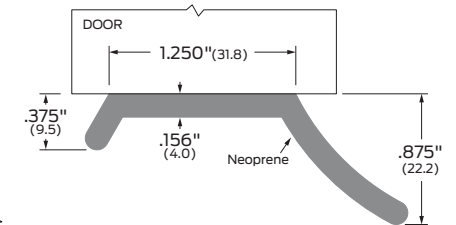
3/16" thick extreme temperature neoprene looped as shown
(Government specification R-6855, Class II, Grade 40.)



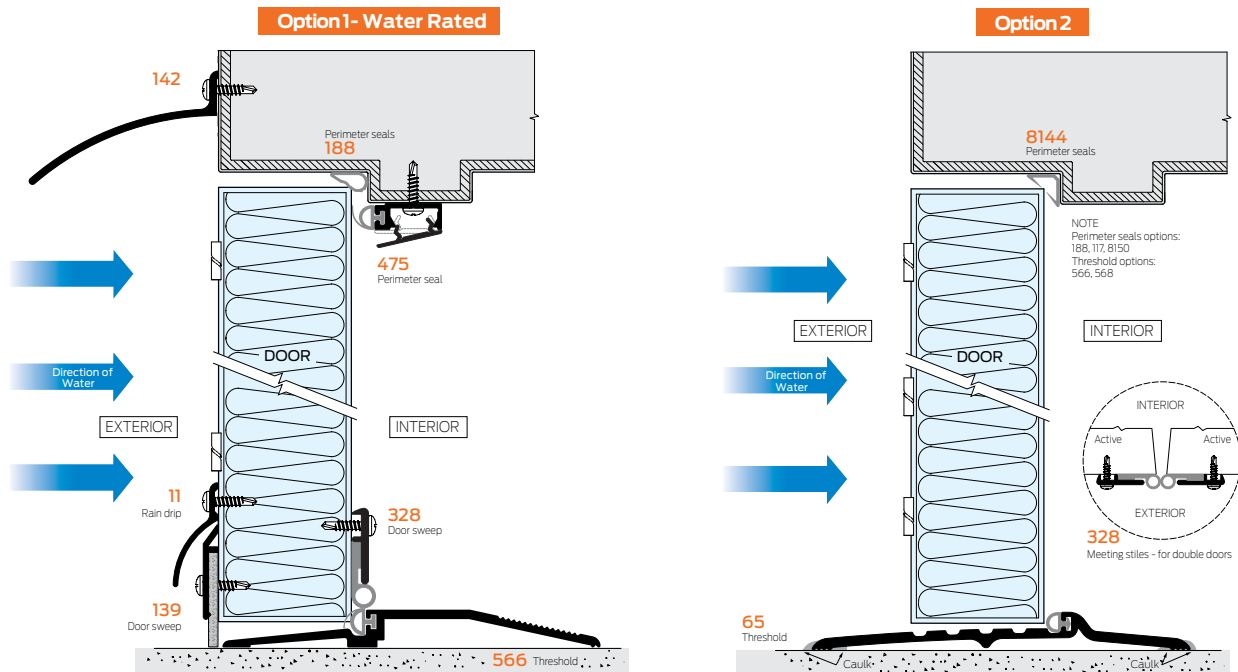
Intermediate stiles

8047R

For overhead doors

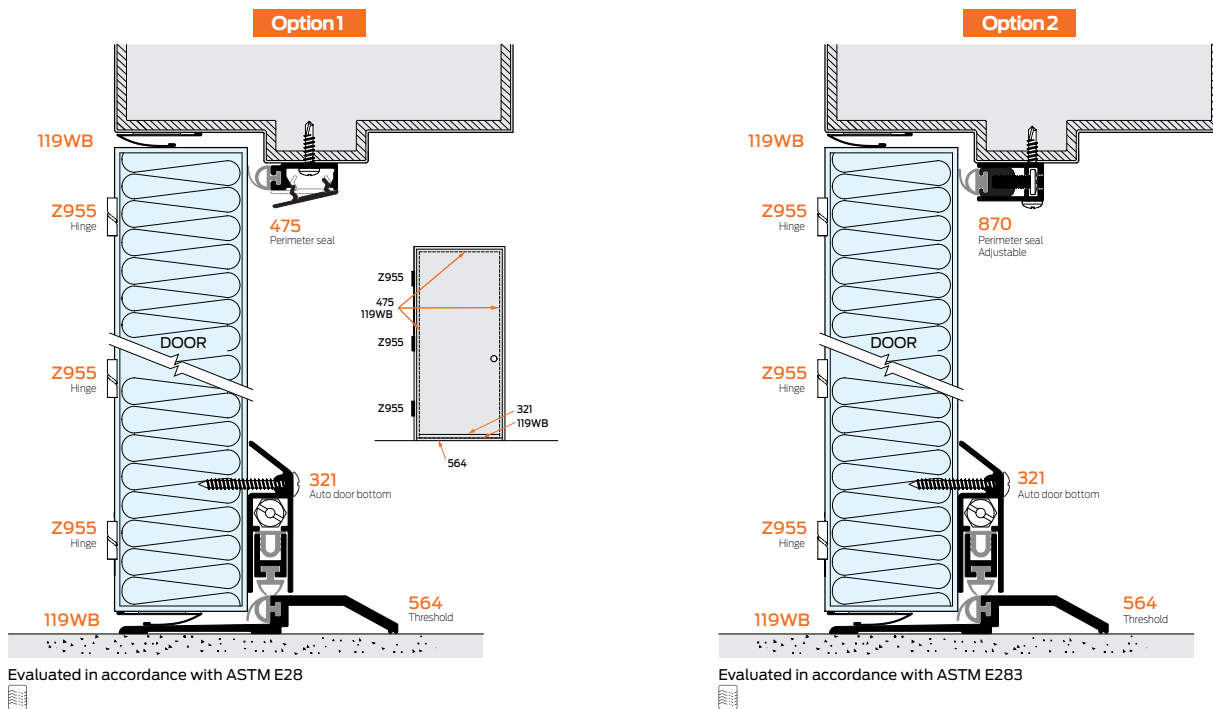


Hurricane protection wind-driven water infiltration (Dade County Florida)



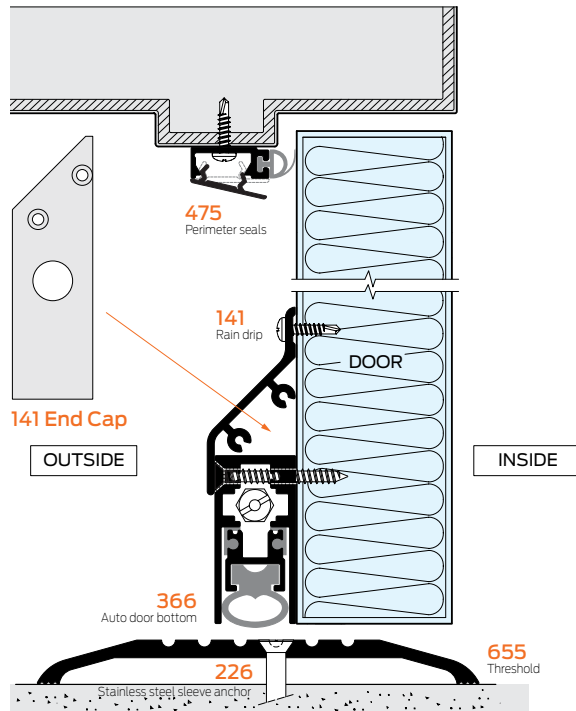
“Safe haven” room gasketing and areas of rescue assistance

Air infiltration - 110 MPH (165KM/H) Wind velocity - air leakage 0.56 CFM (2.8CMH)

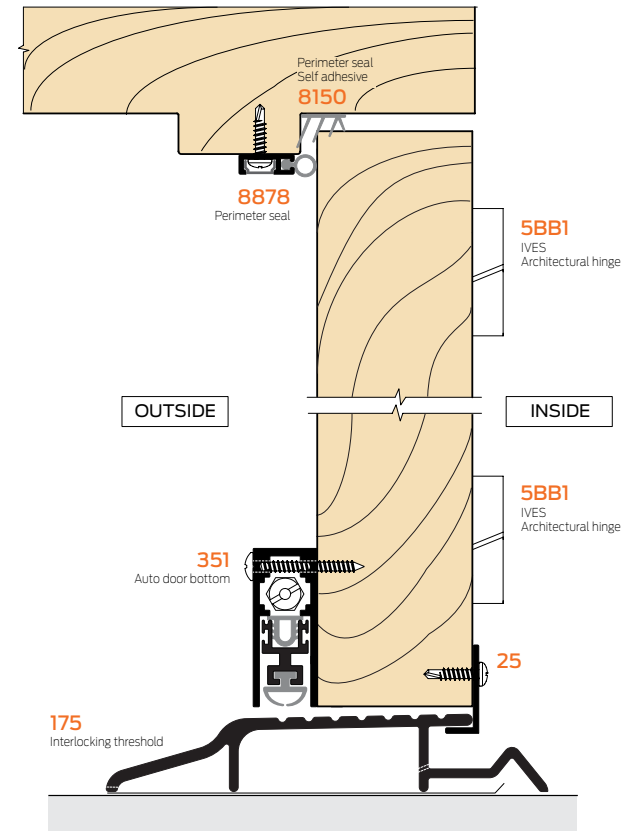


Typical gasketing applications

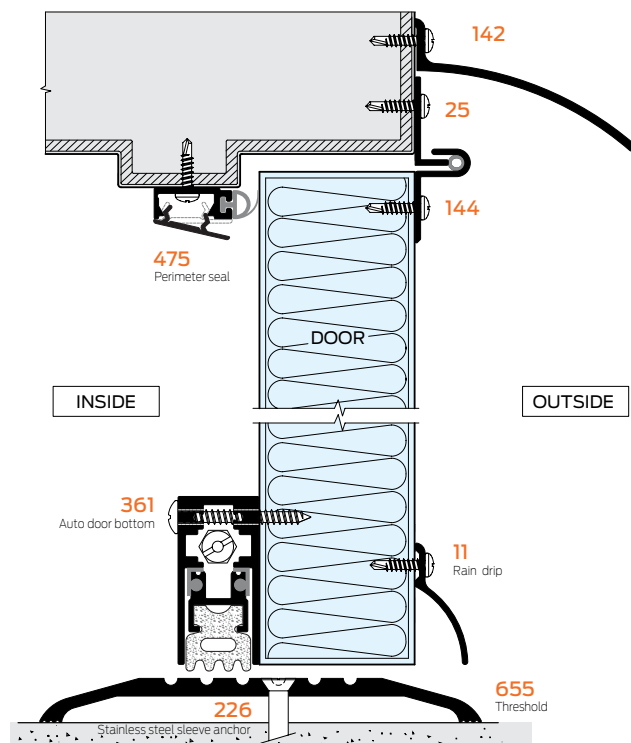
Typical gasketing for exterior inswing door



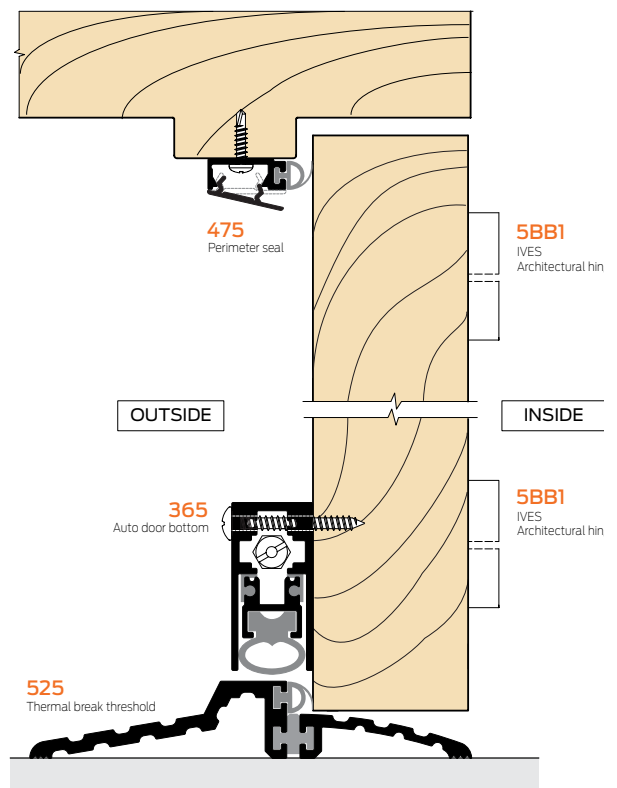
Typical gasketing for residential



Typical gasketing for exterior outswing door



Cold weather solution

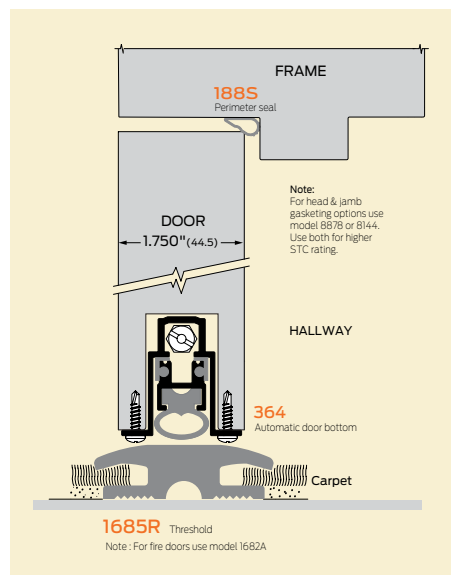


Solutions and specialty products

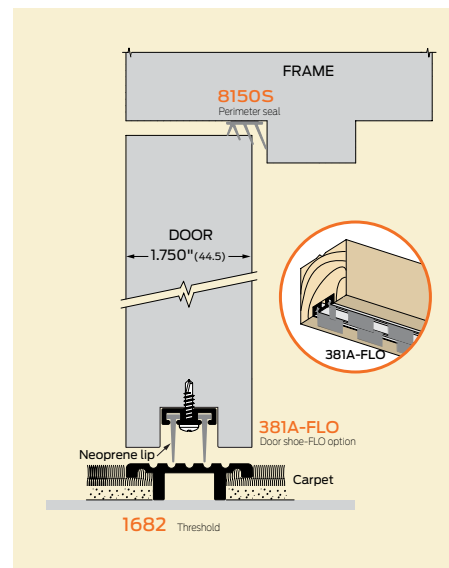
Hotel gasketing solutions



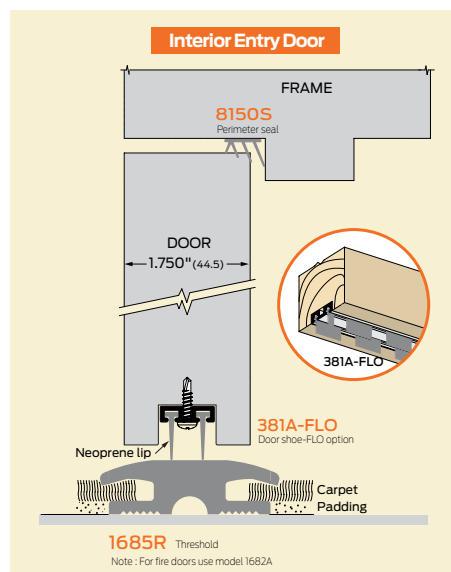
Interior entry doors - option 1



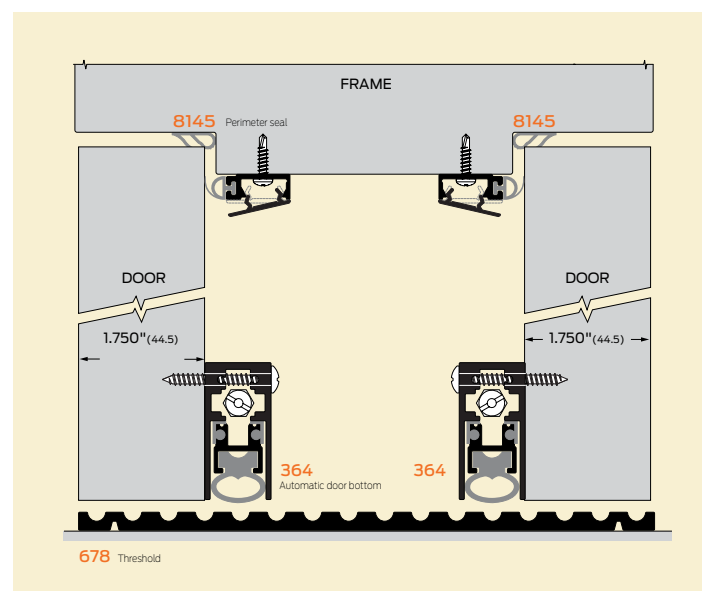
Communicating doors - new construction



Interior entry doors - option 2



Communicating doors- aftermarket



Air control systems

Air infiltration for smoke doors, outside doors, air lock doors, air tight doors.

Air flow pressure applied to a door as listed per testing standards:

.10 inches of water	24.90Pa	15 Miles/Hr
.30 inches of water	76.00Pa	25 Miles/Hr
.60 inches of water	150Pa	35 Miles/Hr
1.23 inches of water	306Pa	50 Miles/Hr
2.76 inches of water	688Pa	75 Miles/Hr
4.92 inches of water	1223Pa	100 Miles/Hr

Pressure Rate	Standard	Leakage Rate
.10 inches of water	NFPA 105, UL 1784, IBC 715.4.3.1 STD	3.0 CFM = 16.95 CMH/LM

Standard			
Pressure Rate	System#	Part#	Leakage Rate
.30 inches of water	K	No gasketing	11.36 CFM = 64.18 CMH/LM
.30 inches of water	Z-1	475+565+365	.02 CFM = .11 CMH/LM
.30 inches of water	D*	328/326 +164+154	.07 CFM = .39 CMH/LM
.30 inches of water	A*	328/326 +565+361	.03 CFM = .17 CMH/LM
.30 inches of water	B	770+565+361	.04 CFM = .22 CMH/LM
.30 inches of water	Z-2	370+565+365	.07 CFM = .39 CMH/LM
.30 inches of water	E	328+164+361	.17 CFM = .96 CMH/LM
.30 inches of water	F	318+564+351	.25 CFM = 1.41 CMH/LM
.30 inches of water	SM-11	8144+8770+355	.27 CFM = 1.52 CMH/LM
.30 inches of water	G	312+565+351	.35 CFM = 1.97 CMH/LM
.60 inches of water	SM-12	475+565+365	.04 CFM = .22 CMH/LM
.60 inches of water	SM-14	328+565+361	.06 CFM = .33 CMH/LM
.60 inches of water	SM-16	770+565+361	.07 CFM = .39 CMH/LM
.60 inches of water	SM-17	370+565+365	.08 CFM = .45 CMH/LM
.60 inches of water	SM-18*	328/326+164+361	.25 CFM = 1.41 CMH/LM
1.2 inches of water	SM-19*	328/326+565+361	.09 CFM = .51 CMH/LM
1.23 inches of water	SM-20	770+565+361	.11 CFM = .62 CMH/LM
1.23 inches of water	Z-3	370+565+365	.16 CFM = .90 CMH/LM
1.23 inches of water	SM-21*	328/326 +164+361	.38 CFM = 2.15 CMH/LM
1.23 inches of water	SM-22	8144+8770+355	.64 CFM = 3.62 CMH/LM
2.76 inches of water	SM-23	8144+8770+355	1.39 CFM = 7.85 CMH/LM
4.92 inches of water	SM-24	475+564+119WB	.56 CFM = 2.82 CMH/LM

CMH / LMC = Cubic meter per hour / Linear meter of crack.

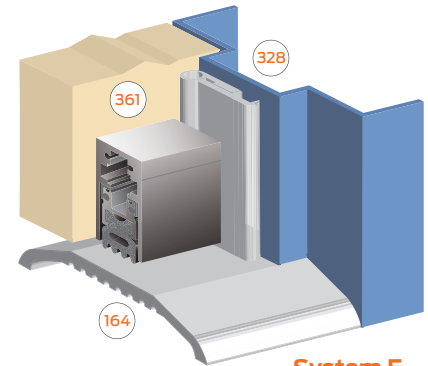
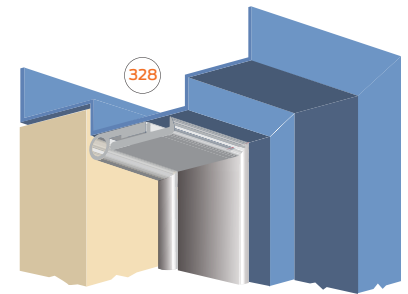
*328 used for hinge side, 326 for head and lock side.

Smoke and draft control

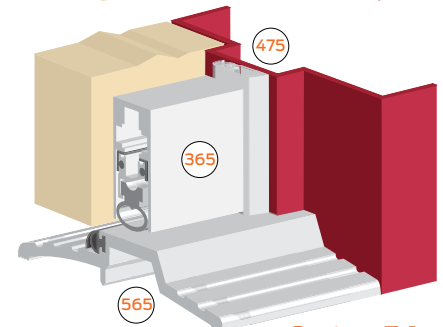
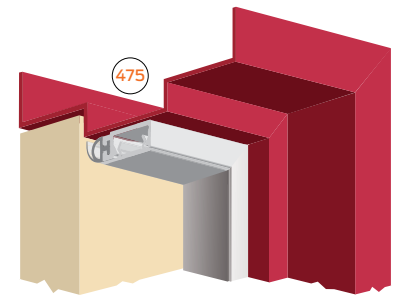
Fire door assemblies shall also meet the NFPA 105 requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot [0.01524 m³/(sq m²)] of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Installation of smoke doors shall be in accordance with NFPA 105.

Conclusions and observations

- 1) To comply with NFPA 105 and/or any of the standards that refer to air/smoke infiltration rates, door seals must be specified and installed. In general a door will not pass the smoke test without gasketing.
- 2) The higher the air pressure differential, the better the quality of the gasketing is needed.
- 3) Adjustable gasketing facilitates installation and allows adjustment when needed for consistent performance over time.
- 4) Hospitals are designed with the idea of keeping patients in their rooms in case of fire. In a room that measures 10 x 10 x 9 feet with a 3 x 7 foot door, the room will be 100% filled with smoke from smoke-filled corridors in 15 minutes if the door only complies with the UL 1784/ NFPA 105 maximum leakage standard 3.0 CFM. If the leakage rate is reduced to .02 CFM using smoke control systems, it will take 37 hours for smoke to fill that same room.
- 5) Although fast, efficient evacuation is the goal in school fires, prudent design should provide adequate smoke protection exceeding 15 minutes for students who might remain trapped in fully engaged fire zones.



System E



System Z-1

Replacement rubber reference chart



Rubber part number	Compatible models
1370N	376, 1840, 1370, 3709
139N	139
153N	111, 153, 253
312N	312
314N	50, 314
3150N	55, 55FS, 56, 56FS, 3056FS, 38
318N	140, 318, 322
320N	320, 321, 323
326N	326, 3709
328N	328, 3708
3365N	365, 365, 366, 367, 368, 369
363N	170, 270, 360, 361, 362, 470
365N	272, 472, 770
3676N	2673, 2676, 3672, 3673, 3674, 3675, 3676
367N	367, 368, 369
383N	381, 383, 477
486N	73, 383, 475, 478, 485, 560, 563, 564, 566, 568, 3831, 7338, 7770
521S-BK	521FS
52N	52
539N	539
53N	53, 853, 3551
570S-BK	65, 355, 570
572N	265, 267, 524, 525, 526, 565, 561, 627, 628, 8729
5813S-BK	99, 5831
59N	59FS
72N	72, 452
7770N	7770
8194N	134, 3546, 8194, 8195
8197N	8151, 8191, 8197
8303S-BK	429, 8303, 8878
8353N	350, 351, 352, 7350
8452N	8452
8557S-B	33, 35, 100, 58FS, 399, 555, 557, 873, 3557, 5833
870S-BK	31, 36, 712, 870, 5831FS
9137S-CL	9137

Part number index

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15.....18	138.....100, 101	375.....72, 81	770SP.....70	8048S.....95
18.....99	139.....73, 86	376.....74	770SPB.....87	8049R.....67
19.....99	139N.....97	381.....67, 83	770STST.....70	8052N.....94
19W.....99	140.....73, 86	383.....84	810N.....98	8053Q.....95
23.....12	141.....60, 46, 47	383FS.....84	811N.....98	8054S.....95
25.....60, 12	142.....60	398V.....82	812N.....98	8055S.....95
31.....75	144.....60	399V.....82	813N.....98	8056S.....95
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33.....75	154.....66	429.....76	826N.....97	8136P.....98
34.....82	155.....78	452.....66	870.....70	8137.....100
34P.....98	156.....79	469.....28	870SPB.....87	8138.....100
35.....82	159FS.....83	470.....71	871.....64, 70, 78	8144FS.....96, 107
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40.....85	188FS.....96	485 ZAG.....114	971 / 972 Bio.....117	8151.....67
40/41.....85	188S.....96	488BIO.....96	972.....117	8172N.....97
41.....85	188S/188FS/188BIO.....96	488FS.....96, 107	973.....117	8191.....63
43.....84	221.....11	488S.....96	973 / 974 Bio.....117	8192.....64, 80, 102
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47.....84	223.....11	500.....99	1050R.....112	8194.....65, 80, 102
48.....29	224.....11	511.....67	1370.....74	8195.....80
49.....29	226.....11	521FS.....68	1545.....18	8197.....63
49 STC.....110	232.....32	522.....26	1545B.....18	8198.....65
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