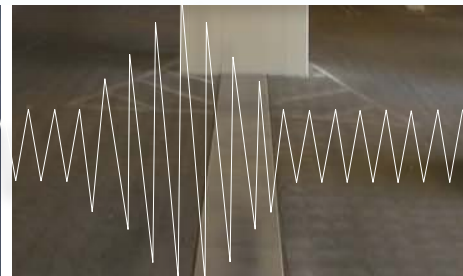
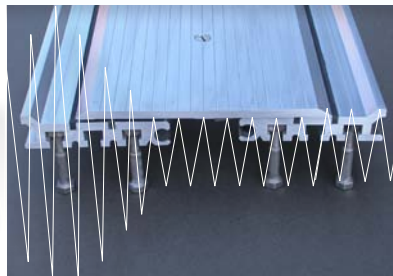
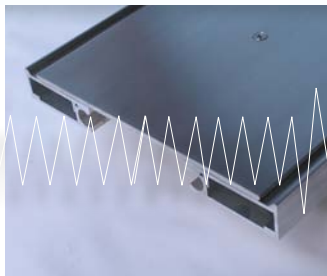
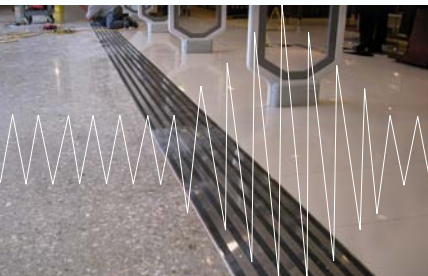


M.H. POWELL & CO., INC.



ARCHITECTURAL SEISMIC EXPANSION JOINTS



www.mhpowell.net



TABLE OF CONTENTS

Walls and Ceilings - Exterior / Interior

| | |
|----------------------------------|-----|
| Elastomeric Systems - DSB series | 3 |
| Aluminum Systems - K series | 4/5 |
| Aluminum Systems - W series | 6/7 |

Floor Joints - Interior / Exterior

| | |
|------------------------|-------|
| Aluminum Standard Duty | 8/9 |
| Aluminum Heavy Duty | 10/11 |
| Custom Standard Duty | 12/13 |
| Custom Heavy Duty | 13 |

Roof Systems

| | |
|------------------------|-------|
| Aluminum Roof Systems | 14/15 |
| Expand-O-Flash Systems | 16 |

| | |
|-----------------------------|----|
| Compression Seals | 17 |
| Flexible Floor Seal Systems | 18 |
| Fire Barriers | 18 |
| Specifications | 19 |
| Environmental Commitment | 20 |

PRACTICAL SOLUTIONS

With over 55 years of experience in the seismic expansion joint industry, **M. H. Powell & Co., Inc.** continues to provide new and innovative solutions.

Steve Heller, CEO of M. H. Powell & Co., Inc. keeps the company in the forefront of expansion joint technology that was pioneered by founder, Harvey Powell.

M. H. Powell & Co., Inc. is best known for their dedication in providing excellent quality products.



www.mhpowell.net

2313 YATES AVENUE
COMMERCE, CA 90040
PHONE : (323) 887-0037
FAX : (323) 887-0877
WEB : www.mhpowell.net

M H POWELL & CO.,INC. OVERVIEW

Mission

M. H. Powell & Co, Inc. is committed to providing quality seismic joint systems that can fill the majority of architectural construction project requirements.

Staff

Our dedicated staff is capable of developing project specific custom design seismic joint systems that address high performance in complicated field conditions. AutoCAD details and detailing consultation are provided for special requirements in harmonizing with architectural aspects.

Products

M. H. Powell & Co, Inc. offers an array of products that meet various project conditions and requirements.

DSB - SERIES

Exposed Seal Material

- Silicone
- Santoprene (TPE)
(CAUTION: Thermal Plastics, such as Santoprene, will melt at 350°F, and may ignite when exposed to flame)

Standard Colors Available - Silicone

| | |
|---------------|--|
| Precast white | |
| Black | |
| Gray | |
| Bronze | |
| Sandstone | |
| Limestone | |

Extruded Silicone Elastomeric Seals

- Available in custom colors
- Color does not fade
- Greater resistance to fire
- Exposure to extreme heat will not produce toxic fumes

| | |
|---------------|--|
| Natural Stone | |
| Adobe Tan | |
| Dusty Rose | |
| Rustic Brick | |
| Blue Spruce | |
| Charcoal | |

Interior / Exterior Ceilings and Walls

DSB Series is appropriate for both indoor and outdoor Wall and Ceiling Seismic Joints.

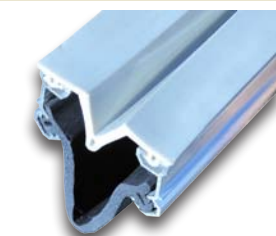
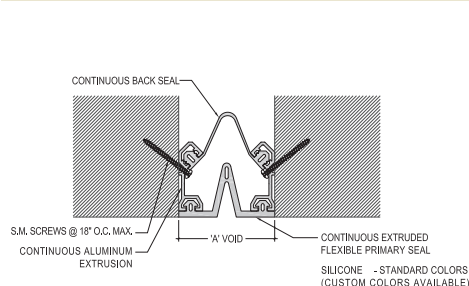
On exterior wall installations, the back seal is installed as a vapor barrier.



| VOID 'A' | MODEL (INTERIOR) | MODEL (EXTERIOR) |
|-------------|------------------|-------------------------|
| 2" (50.80) | DSB - 2 | DSB - 2B |
| 3" (76.00) | DSB - 3 | DSB - 3B |
| 4" (101.60) | DSB - 4 | DSB - 4B |
| 5" (127.00) | DSB - 5 | DSB - 5B |
| 6" (153.00) | DSB - 6 | DSB - 6B |
| 7" (178.00) | DSB - 7 | DSB - 7B |
| 8" (203.00) | DSB - 8 | DSB - 8B |
| 10" & UP | DSB - XW | DSB - XW W/BACK SEAL |

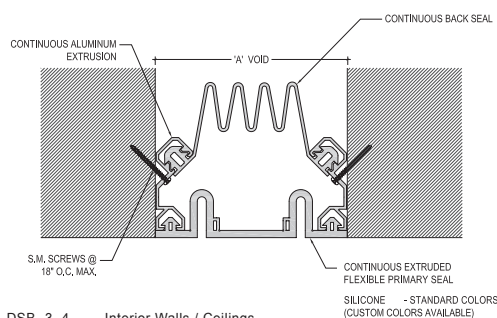
Consult M.H.Powell & Co., Inc for joints larger than 10"

MODEL DSB - 2



DSB - 2 - Interior Walls / Ceilings
DSB - 2B - With Back Seal - Exterior Walls

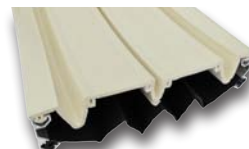
MODEL DSB - 3 | 4



DSB - 3, 4 - Interior Walls / Ceilings
DSB - 3B, 4B - With Back Seal - Exterior Walls

MODEL DSB - 7 | 8

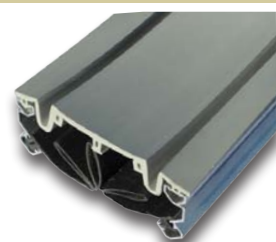
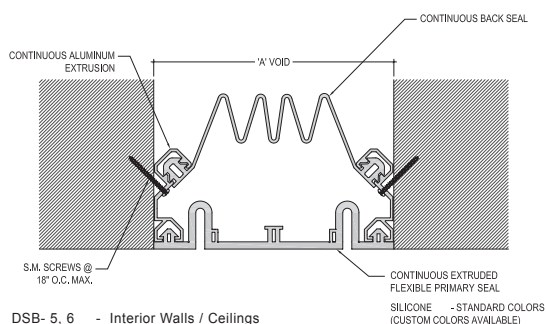
DSB 7 & 8 profiles are used for 7" and 8" Expansion joints.



DSB - 7, 8 - Interior Walls / Ceilings
DSB - 7B, 8B - With Back Seal - Exterior Walls

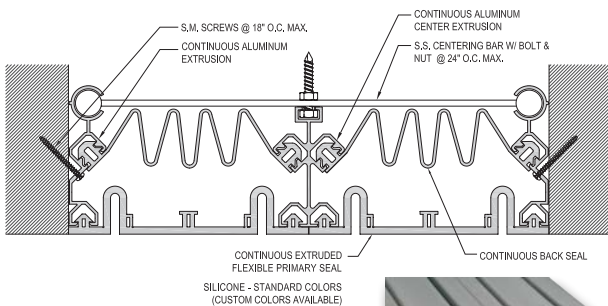
Extruded Flexible Primary seal is available in Santoprene or Silicone in a wide range of standard colors.

MODEL DSB - 5 | 6



DSB - 5, 6 - Interior Walls / Ceilings
DSB - 5B, 6B - With Back Seal - Exterior Walls

MODEL DSB - XW EXTRA WIDE



DSB - XW (Extra Wide) assembly is used for Expansion Joints which are 10" or larger.

K - SERIES - WALLS / CEILINGS

K series is one of the most functional and aesthetically pleasing expansion joint covers with clean lines and ease of installation.

This system can be installed flush mounted or surface mounted.

Standard finish : Clear Anodized Aluminum

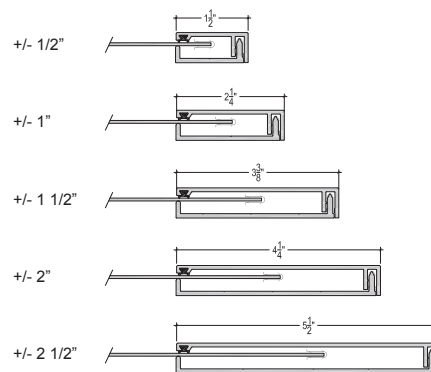
Optional finish : Laminated Brass, Brushed Stainless Steel and/ or Kynar

Optional : • 1 or 2 hour fire barrier based on rated wall construction
• Vapor barrier at exterior wall joint assemblies

Application :

- Interior and exterior walls and ceilings, for seismic voids of 1" to 10"
- Alternate installation options are available for larger openings.

Maximum movement

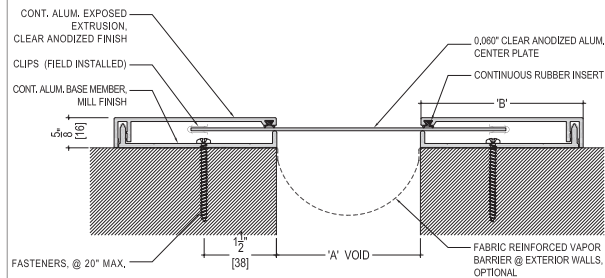


MODEL KH WALL / CEILING JOINTS - FLAT CONDITION

| MODEL | VOID 'A' | MOVEMENT | 'B' |
|------------|---------------|-----------------|--------|
| KH - 1 - 1 | 1" (25.40mm) | +/- 100% (1") | 1 1/2" |
| KH - 2 - 1 | 2" (50.80mm) | +/- 50% (1") | 1 1/2" |
| KH - 2 - 2 | 2" (50.80mm) | +/- 100% (2") | 2 1/4" |
| KH - 3 - 2 | 3" (76.00mm) | +/- 65% (2") | 2 1/4" |
| KH - 3 - 3 | 3" (76.00mm) | +/- 100% (3") | 3 3/8" |
| KH - 4 - 2 | 4" (101.60mm) | +/- 50% (2") | 2 1/4" |
| KH - 4 - 4 | 4" (101.60mm) | +/- 100% (4") | 4 1/4" |
| KH - 5 - 3 | 5" (127.00mm) | +/- 60% (3") | 3 3/8" |
| KH - 5 - 4 | 5" (127.00mm) | +/- 80% (4") | 4 1/4" |
| KH - 6 - 3 | 6" (153.00mm) | +/- 50% (3") | 3 3/8" |
| KH - 6 - 5 | 6" (153.00mm) | +/- 80% (5") | 5 1/2" |
| KH - 7 - 4 | 7" (178.00mm) | +/- 55% (4") | 4 1/4" |
| KH - 7 - 5 | 7" (178.00mm) | +/- 70% (5") | 5 1/2" |
| KH - 8 - 4 | 8" (203.00mm) | +/- 50% (4") | 4 1/4" |
| KH - 8 - 5 | 8" (203.00mm) | +/- 60% (5") | 5 1/2" |



Assembly Width = 'A' Void + ('B' X 2)
Contact M.H.Powell & Co., Inc. for sizes and custom models to match required movement.

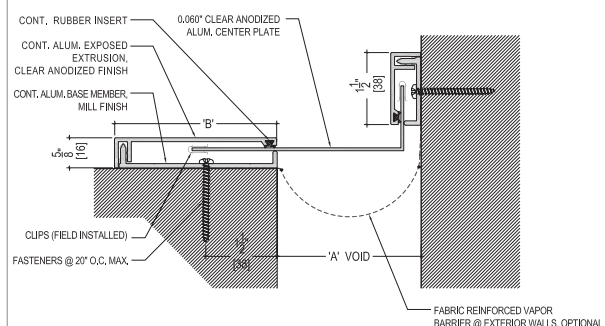


MODEL KF WALL / CEILING JOINTS - CORNER CONDITION

| MODEL | VOID 'A' | MOVEMENT | 'B' |
|----------------|---------------|--------------------|--------|
| KF - 1 - 1 | 1" (25.40mm) | +/- 100% (1") | 2 1/4" |
| KF - 2 - 1 | 2" (50.80mm) | +/- 50% (1") | 2 1/4" |
| KF - 2 - 2 | 2" (50.80mm) | +/- 100% (2") | 4 1/4" |
| KF - 3 - 1 1/2 | 3" (76.00mm) | +/- 50% (1 1/2") | 3 3/8" |
| KF - 3 - 2 | 3" (76.00mm) | +/- 65% (2") | 4 1/4" |
| KF - 4 - 2 | 4" (101.60mm) | +/- 50% (2") | 4 1/4" |
| KF - 4 - 2 1/2 | 4" (101.60mm) | +/- 60% (2 1/2") | 5 1/2" |
| KF - 5 - 2 | 5" (127.00mm) | +/- 40% (2") | 4 1/4" |
| KF - 5 - 2 1/2 | 5" (127.00mm) | +/- 50% (2 1/2") | 5 1/2" |
| KF - 6 - 2 | 6" (153.00mm) | +/- 30% (2") | 4 1/4" |
| KF - 6 - 2 1/2 | 6" (153.00mm) | +/- 40% (2 1/2") | 5 1/2" |
| KF - 7 - 2 | 7" (178.00mm) | +/- 30% (2") | 4 1/4" |
| KF - 7 - 2 1/2 | 7" (178.00mm) | +/- 35% (2 1/2") | 5 1/2" |
| KF - 8 - 2 1/2 | 8" (203.00mm) | +/- 30% (2 1/2") | 5 1/2" |



Assembly Width = 'A' Void + ('B')
Contact M.H.Powell & Co., Inc. for sizes and custom models to match required movement.

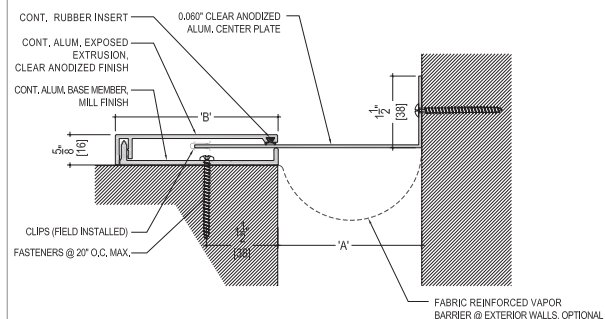


MODEL KFM WALL / CEILING JOINTS - CORNER CONDITION

| MODEL | VOID 'A' | MOVEMENT | 'B' |
|-----------------|---------------|--------------------|--------|
| KFM - 1 - 1 | 1" (25.40mm) | +/- 100% (1") | 2 1/4" |
| KFM - 2 - 1 | 2" (50.80mm) | +/- 50% (1") | 2 1/4" |
| KFM - 2 - 2 | 2" (50.80mm) | +/- 100% (2") | 4 1/4" |
| KFM - 3 - 1 1/2 | 3" (76.00mm) | +/- 50% (1 1/2") | 3 3/8" |
| KFM - 3 - 2 | 3" (76.00mm) | +/- 65% (2") | 4 1/4" |
| KFM - 4 - 2 | 4" (101.60mm) | +/- 50% (2") | 4 1/4" |
| KFM - 4 - 2 1/2 | 4" (101.60mm) | +/- 60% (2 1/2") | 5 1/2" |
| KFM - 5 - 2 | 5" (127.00mm) | +/- 40% (2") | 4 1/4" |
| KFM - 5 - 2 1/2 | 5" (127.00mm) | +/- 50% (2 1/2") | 5 1/2" |
| KFM - 6 - 2 | 6" (153.00mm) | +/- 30% (2") | 4 1/4" |
| KFM - 6 - 2 1/2 | 6" (153.00mm) | +/- 40% (2 1/2") | 5 1/2" |
| KFM - 7 - 2 | 7" (178.00mm) | +/- 30% (2") | 4 1/4" |
| KFM - 7 - 2 1/2 | 7" (178.00mm) | +/- 35% (2 1/2") | 5 1/2" |
| KFM - 8 - 2 1/2 | 8" (203.00mm) | +/- 30% (2 1/2") | 5 1/2" |



Assembly Width = 'A' Void + ('B')
Contact M.H.Powell & Co., Inc. for sizes and custom models to match required movement.



K - SERIES - RADIUS



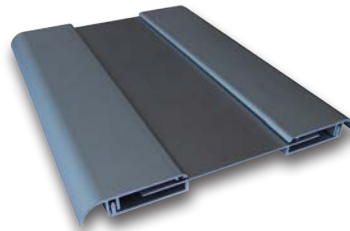
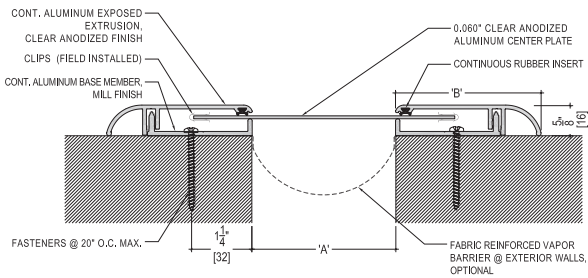
In consideration of **ADA** requirements and in order to avoid square & sharp edges, the new **K-Series model - KHR** is introduced for surface mounted seismic joint systems.

Model KHR, with its curved edges provides smooth transition from wall surface to aluminum seismic joint system. The new KHR series is highly recommended for Hospitals, Schools and Senior occupied building interiors.

Clean straight lines and aerodynamic shape bring a modern hi-tech outlook to the interior built environment.

ADA Friendly
Smooth curved edges

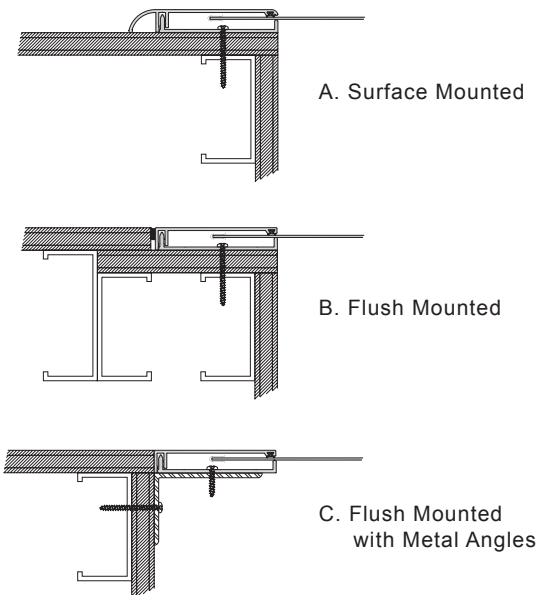
MODEL KHR



| MODEL | VOID 'A' | MOVEMENT | 'B' |
|------------|---------------|-----------------|--------|
| KHR - 1- 1 | 1" (25.40mm) | +/- 100% (1") | 3" |
| KHR - 2- 1 | 2" (50.80mm) | +/- 50% (1") | 3" |
| KHR - 2- 2 | 2" (50.80mm) | +/- 100% (2") | 3" |
| KHR - 3- 2 | 3" (76.00mm) | +/- 65% (2") | 3" |
| KHR - 3- 3 | 3" (76.00mm) | +/- 100% (3") | 4 1/8" |
| KHR - 4- 2 | 4" (101.60mm) | +/- 50% (2") | 3" |
| KHR - 4- 4 | 4" (101.60mm) | +/- 100% (4") | 5" |
| KHR - 5- 3 | 5" (127.00mm) | +/- 60% (3") | 4 1/8" |
| KHR - 5- 4 | 5" (127.00mm) | +/- 80% (4") | 5" |
| KHR - 6- 3 | 6" (153.00mm) | +/- 50% (3") | 4 1/8" |
| KHR - 6- 5 | 6" (153.00mm) | +/- 80% (5") | 5 3/4" |
| KHR - 7- 4 | 7" (178.00mm) | +/- 55% (4") | 5" |
| KHR - 7- 5 | 7" (178.00mm) | +/- 70% (5") | 5 3/4" |
| KHR - 8- 4 | 8" (203.00mm) | +/- 50% (4") | 5" |
| KHR - 8- 5 | 8" (203.00mm) | +/- 60% (5") | 5 3/4" |

K - SERIES

INSTALLATION OPTIONS



Due to its unique design K-series has become a perfect match for various interior and exterior project conditions.

The model has achieved its success over the years due to the number of compatible installation options which are custom fabricated to meet specific design requirements.

A. Wall / Ceiling - Surface Mounted

K-Series models can be simply mounted on any interior or exterior substrate to achieve the finishes required.

New KHR model has been developed to match ADA requirements with smooth edges to minimize any difficulties for building users due to sharp edges.

B. Wall / Ceiling - Flush Mounted

Due to its compatible 5/8" assembly thickness with standard drywall sheathing, this model can be flush mounted on both interior and exterior wall or ceiling finished surfaces. This flush installation creates a smooth transition of surface across the seismic expansion joint.

C. Flush Mounted With Metal Angles

This method of installation is applied where the movement requirements are reduced at wider expansion joints or at corner conditions.

Extrusions can be mounted on Aluminum or Steel angles attached to the inner wall of expansion joint providing a smooth finish.

MH Powell & Co., Inc. is ready to assist Architects and Designers with details and installation information at early design stages of the projects, contributing its expert knowledge to achieve project specific design and technical objectives.

Every mounting method is applicable for both interior and exterior conditions and fire rated installations.

(See page 18 for optional fire barriers)

W - SERIES WALL & CEILING JOINTS

W-Series offers Aluminum wall and ceiling joint systems both for interior and exterior.

Products are available for new construction as well as for existing conditions. Aluminum cover plates are available in Mill finish and Clear Anodized finish.

Custom finishes are available upon request to match Architectural requirements.



MODEL WS - X

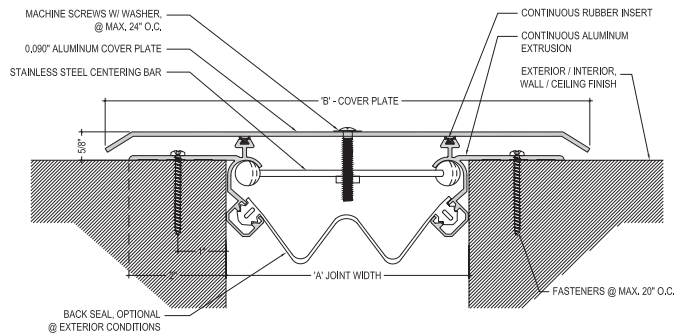
CEILING TO CEILING JOINTS

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|----------|--------------|------------------|--------------|
| WS - 2 | 2" (50.80) | 3" (76.20) | 8" (203.20) |
| WS - 2-2 | 2" (50.80) | 4" (101.60) | 8" (203.20) |
| WS - 3 | 3" (76.20) | 4 1/2" (114.30) | 9" (228.60) |
| WS - 3-3 | 3" (76.20) | 6" (152.40) | 9" (228.60) |
| WS - 4 | 4" (101.60) | 6" (152.40) | 10" (254.00) |
| WS - 4-4 | 4" (101.60) | 8" (203.20) | 10" (254.00) |
| WS - 5 | 5" (127.00) | 7 1/2" (190.50) | 11" (279.40) |
| WS - 5-5 | 5" (127.00) | 10" (254.00) | 12" (304.80) |
| WS - 6 | 6" (152.40) | 9" (228.60) | 12" (304.80) |
| WS - 6-6 | 6" (152.40) | 12" (304.80) | 14" (355.60) |
| WS - 7 | 7" (178.80) | 10 1/2" (266.70) | 13" (330.20) |
| WS - 7-7 | 7" (178.80) | 14" (355.60) | 16" (406.40) |
| WS - 8 | 8" (203.20) | 12" (304.80) | 14" (355.60) |
| WS - 8-8 | 8" (203.20) | 16" (406.40) | 18" (457.20) |
| WS - 9 | 9" (228.60) | 13 1/2" (342.90) | 16" (406.40) |
| WS - 9-9 | 9" (228.60) | 18" (457.20) | 20" (508.00) |
| WS - 10 | 10" (254.00) | 15" (381.00) | 17" (431.80) |



'B' = 'A' Void + ('A' X Movement %) + 2"
Min. 'B' = 'A' Void + (2 x 3")
Apply the greater value

Consult M.H.Powell & Co., Inc. for joints larger than 12".

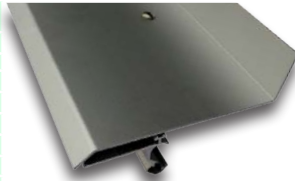


*Aluminum cover plate thickness to vary with seismic joint width 'A'

MODEL WSL - X

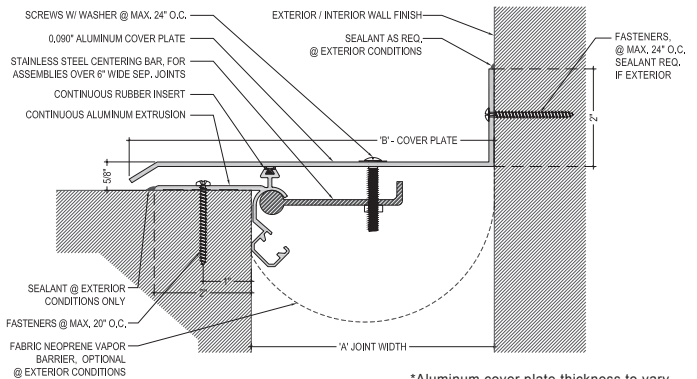
WALL TO CEILING JOINTS - CORNER

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|-----------|--------------|------------------|------------------|
| WSL - 2 | 2" (50.80) | 3" (76.20) | 5" (127.00) |
| WSL - 2-2 | 2" (50.80) | 4" (101.60) | 5" (127.00) |
| WSL - 3 | 3" (76.20) | 4 1/2" (114.30) | 6" (152.40) |
| WSL - 3-3 | 3" (76.20) | 6" (152.40) | 7" (177.80) |
| WSL - 4 | 4" (101.60) | 6" (152.40) | 7" (177.80) |
| WSL - 4-4 | 4" (101.60) | 8" (203.20) | 9" (228.60) |
| WSL - 5 | 5" (127.00) | 7 1/2" (190.50) | 8 1/2" (215.90) |
| WSL - 5-5 | 5" (127.00) | 10" (254.00) | 11" (279.40) |
| WSL - 6 | 6" (152.40) | 9" (228.60) | 10" (254.00) |
| WSL - 6-6 | 6" (152.40) | 12" (304.80) | 13" (330.20) |
| WSL - 7 | 7" (178.80) | 10 1/2" (266.70) | 11 1/2" (292.10) |
| WSL - 7-7 | 7" (178.80) | 14" (355.60) | 15" (381.00) |
| WSL - 8 | 8" (203.20) | 12" (304.80) | 13" (330.20) |
| WSL - 8-8 | 8" (203.20) | 16" (406.40) | 17" (431.80) |
| WSL - 9 | 9" (228.60) | 13 1/2" (342.90) | 14 1/2" (368.30) |
| WSL - 9-9 | 9" (228.60) | 18" (457.20) | 19" (482.60) |
| WSL - 10 | 10" (254.00) | 15" (381.00) | 16" (406.40) |



'B' = 'A' Void + ('A' X Movement %) + 1"
Min. 'B' = 'A' Void + (3")
Apply the greater value

Consult M.H.Powell & Co., Inc. for joints larger than 12".



*Aluminum cover plate thickness to vary with seismic joint width 'A'

MODEL WE - X

WALL JOINTS - EXTERIOR

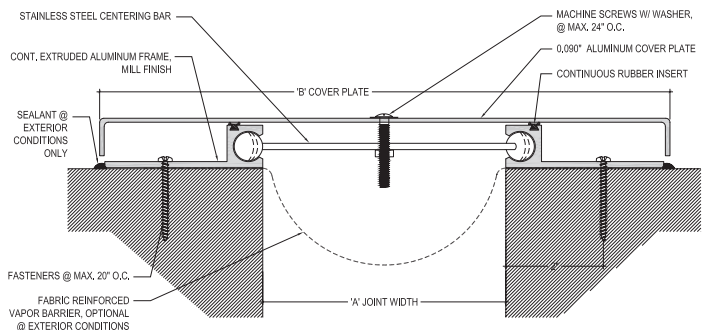
| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|----------|--------------|------------------|--------------|
| WE - 2 | 2" (50.80) | 3" (76.20) | 10" (254.00) |
| WE - 2-2 | 2" (50.80) | 4" (101.60) | 10" (254.00) |
| WE - 3 | 3" (76.20) | 4 1/2" (114.30) | 11" (279.40) |
| WE - 3-3 | 3" (76.20) | 6" (152.40) | 11" (279.40) |
| WE - 4 | 4" (101.60) | 6" (152.40) | 12" (304.80) |
| WE - 4-4 | 4" (101.60) | 8" (203.20) | 12" (304.80) |
| WE - 5 | 5" (127.00) | 7 1/2" (190.50) | 13" (330.20) |
| WE - 5-5 | 5" (127.00) | 10" (254.00) | 13" (330.20) |
| WE - 6 | 6" (152.40) | 9" (228.60) | 14" (355.60) |
| WE - 6-6 | 6" (152.40) | 12" (304.80) | 14" (355.60) |
| WE - 7 | 7" (178.80) | 10 1/2" (266.70) | 15" (381.00) |
| WE - 7-7 | 7" (178.80) | 14" (355.60) | 16" (406.40) |
| WE - 8 | 8" (203.20) | 12" (304.80) | 16" (406.40) |
| WE - 8-8 | 8" (203.20) | 16" (406.40) | 18" (457.20) |
| WE - 9 | 9" (228.60) | 13 1/2" (342.90) | 17" (431.80) |
| WE - 9-9 | 9" (228.60) | 18" (457.20) | 20" (508.00) |
| WE - 10 | 10" (254.00) | 15" (381.00) | 18" (457.20) |



Model WE is more suitable for Wall and Ceiling joints at exterior conditions. Refer Roof RPP Model (Pg. 14) for similar Roof joint cover system.

'B' = 'A' Void + ('A' X Movement %) + 2"
Min. 'B' = 'A' Void + (2 x 4")
Apply the greater value

Consult M.H.Powell & Co., Inc. for joints larger than 12".

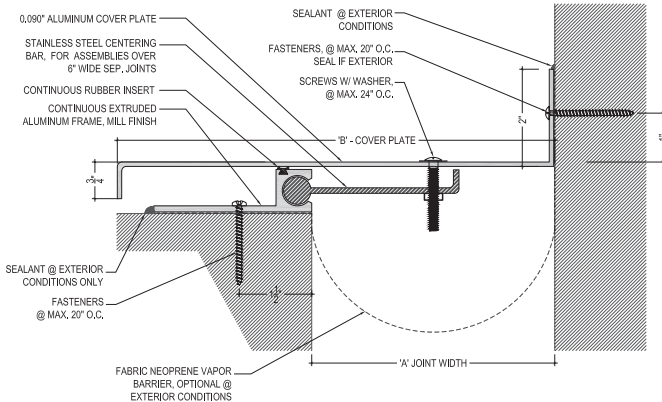


*Aluminum cover plate thickness to vary with seismic joint width 'A'



MODEL WEL - X

WALL JOINTS - EXTERIOR CORNER



W-Series offers wide range of seismic expansion movements.

Custom designed Aluminum cover plates provide the ability to withstand up to 100% or more maximum seismic joint movement.

M.H. Powell & Co., Inc. is always ready to offer its experienced technical assistance for Architects, Engineers and Builders in designing expansion joint cover systems for project specific conditions.

Contact M.H. Powell & Co., Inc. for further details and assistance.



Model WEL is more suitable for Wall and Ceiling joints at exterior conditions

'B' = 'A' Void + ('A' X Movement %) + 1"
Min. 'B' = 'A' Void + (4")
Apply the greater value

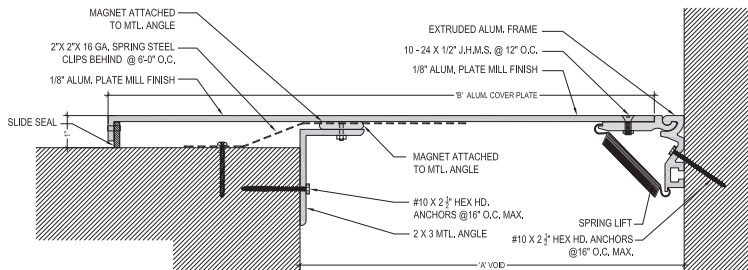
*Aluminum cover plate thickness to vary with seismic joint width 'A'

Consult M.H.Powell & Co., Inc. for joints larger than 12".

| MODEL | 'A'-VOID | MAX. OPENING | 'B'- COVER |
|-----------|--------------|------------------|------------------|
| WEL - 1 | 1" (25.40) | 1 1/2" (38.10) | 5" (127.00) |
| WEL - 2 | 2" (50.80) | 3" (76.20) | 6" (152.40) |
| WEL - 2-2 | 2" (50.80) | 4" (101.60) | 6" (152.40) |
| WEL - 3 | 3" (76.20) | 4 1/2" (114.30) | 7" (178.80) |
| WEL - 3-3 | 3" (76.20) | 6" (152.40) | 7" (178.80) |
| WEL - 4 | 4" (101.60) | 6" (152.40) | 8" (203.20) |
| WEL - 4-4 | 4" (101.60) | 8" (203.20) | 9" (228.60) |
| WEL - 5 | 5" (127.00) | 7 1/2" (190.50) | 9" (228.60) |
| WEL - 5-5 | 5" (127.00) | 10" (254.00) | 11" (279.40) |
| WEL - 6 | 6" (152.40) | 9" (228.60) | 10" (254.00) |
| WEL - 6-6 | 6" (152.40) | 12" (304.80) | 13" (330.20) |
| WEL - 7 | 7" (178.80) | 10 1/2" (266.70) | 11 1/2" (292.10) |
| WEL - 7-7 | 7" (178.80) | 14" (355.60) | 15" (381.00) |
| WEL - 8 | 8" (203.20) | 12" (304.80) | 13" (330.20) |
| WEL - 8-8 | 8" (203.20) | 16" (406.40) | 17" (431.80) |
| WEL - 9 | 9" (228.60) | 13 1/2" (342.90) | 14 1/2" (368.30) |
| WEL - 9-9 | 9" (228.60) | 18" (457.20) | 19" (482.60) |
| WEL - 10 | 10" (254.00) | 15" (381.00) | 16" (406.40) |

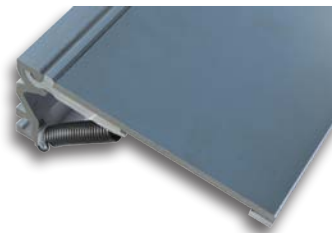
CUSTOM DESIGN

WALL JOINTS



MODEL ALEW

CUSTOM - WALL JOINT



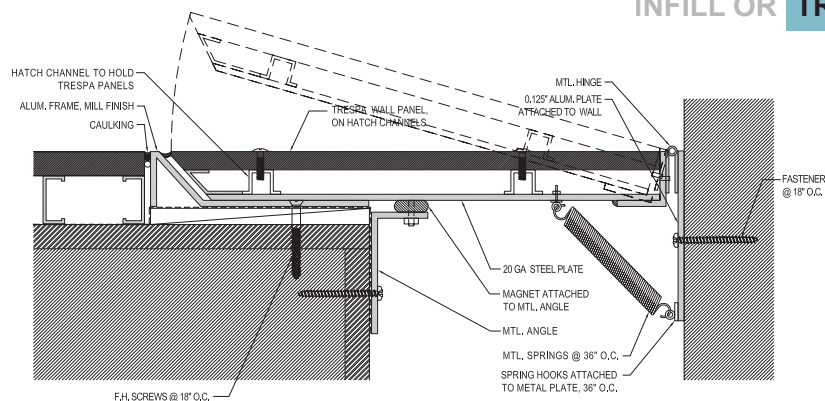
Model ALEW Wall joint system with spring lift, is designed to withstand maximum seismic movements. With this new custom model the capability to deal with much larger range of expansion joint widths has increased.

Contact M.H. Powell & Co., Inc. for more information.

INFILL OR

TRESPA PANEL JOINT SYSTEM

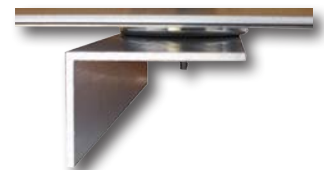
CUSTOM - WALL JOINT



Project specific custom design expansion joint systems offer a wide range of options to make the elevations more architecturally appealing.

Use of magnets provide additional wind load support for wider seismic expansion joint covers.

Wall finish panels on Exterior/ Interior walls can be installed on top of metal joint cover system making the expansion joint cover hidden.



Standard Duty Floor Joints

The standard duty floor expansion joint systems offered by M.H.Powell & Co., Inc. are in compliance with **ADA** requirements.

A wide range of options are available for both new and existing floor construction conditions with possibilities for factory custom modifications to meet project specific needs.

Aluminum plate thickness varies with seismic joint width.

These systems can be furnished with optional 1 and 2 hour fire barrier as noted on page 18.



MODEL BO

FLOOR TO FLOOR (EXISTING TO NEW)

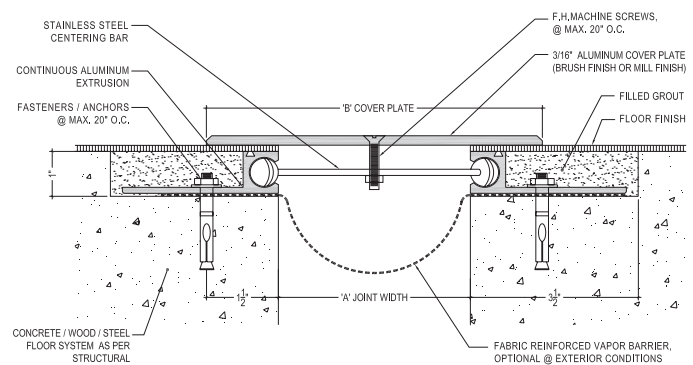
| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|----------|--------------|------------------|------------------|
| BO - 1 | 1" (25.40) | 2" (50.80) | 4" (101.60) |
| BO - 2 | 2" (50.80) | 4" (101.60) | 6" (152.40) |
| BO - 3 | 3" (76.20) | 4 1/2" (114.30) | 6 1/2" (156.10) |
| BO - 3-3 | 3" (76.20) | 6" (152.40) | 8" (203.20) |
| BO - 4 | 4" (101.60) | 6" (152.40) | 8" (203.20) |
| BO - 4-4 | 4" (101.60) | 8" (203.20) | 10" (254.00) |
| BO - 5 | 5" (127.00) | 7 1/2" (190.50) | 9 1/2" (241.30) |
| BO - 5-5 | 5" (127.00) | 10" (254.00) | 12" (304.80) |
| BO - 6 | 6" (152.40) | 9" (228.60) | 11" (279.40) |
| BO - 6-6 | 6" (152.40) | 12" (304.80) | 14" (355.60) |
| BO - 7 | 7" (177.80) | 10 1/2" (266.70) | 12 1/2" (317.50) |
| BO - 7-7 | 7" (177.80) | 14" (355.60) | 16" (406.40) |
| BO - 8 | 8" (203.20) | 12" (304.80) | 14" (355.60) |
| BO - 8-8 | 8" (203.20) | 16" (406.40) | 18" (457.20) |
| BO - 9 | 9" (228.60) | 13 1/2" (342.90) | 15 1/2" (393.70) |
| BO - 9-9 | 9" (228.60) | 18" (457.20) | 20" (508.00) |
| BO - 10 | 10" (254.00) | 15" (381.00) | 17" (431.80) |



'B' - Cover Plate = 'A' Void + Movement + 2"

A min. safety margin of 1" overlap per side is required.

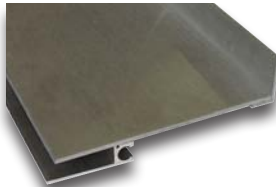
For movements greater than 50% consult M.H. Powell & Co., Inc. .



MODEL BOC

FLOOR (EXISTING / NEW) TO WALL (EXISTING / NEW)

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|-----------|--------------|------------------|------------------|
| BOC - 1 | 1" (25.40) | 2" (50.80) | 3" (76.20) |
| BOC - 2 | 2" (50.80) | 4" (101.60) | 5" (127.00) |
| BOC - 3 | 3" (76.20) | 4 1/2" (114.30) | 5 1/2" (139.70) |
| BOC - 3-3 | 3" (76.20) | 6" (152.40) | 7" (177.80) |
| BOC - 4 | 4" (101.60) | 6" (152.40) | 7" (177.80) |
| BOC - 4-4 | 4" (101.60) | 8" (203.20) | 9" (228.60) |
| BOC - 5 | 5" (127.00) | 7 1/2" (190.50) | 8 1/2" (215.90) |
| BOC - 5-5 | 5" (127.00) | 10" (254.00) | 11" (279.40) |
| BOC - 6 | 6" (152.40) | 9" (228.60) | 10" (254.00) |
| BOC - 6-6 | 6" (152.40) | 12" (304.80) | 13" (330.20) |
| BOC - 7 | 7" (177.80) | 10 1/2" (266.70) | 11 1/2" (292.10) |
| BOC - 7-7 | 7" (177.80) | 14" (355.60) | 15" (381.00) |
| BOC - 8 | 8" (203.20) | 12" (304.80) | 13" (330.20) |
| BOC - 8-8 | 8" (203.20) | 16" (406.40) | 17" (431.80) |
| BOC - 9 | 9" (228.60) | 13 1/2" (342.90) | 14 1/2" (368.30) |
| BOC - 9-9 | 9" (228.60) | 18" (457.20) | 19" (482.60) |
| BOC - 10 | 10" (254.00) | 15" (381.00) | 16" (406.40) |

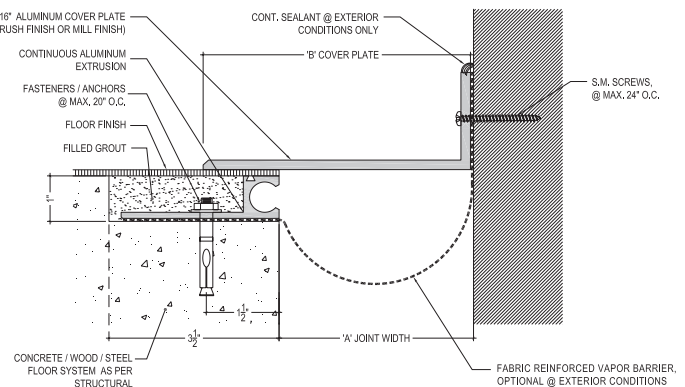


'B' - Cover Plate = 'A' Void + Movement + 1"

A minimum safety margin of 1" overlap is required.

Model BOC can be used at floor to wall joints. This model is applicable for both new and existing conditions.

For movements greater than 50% consult M.H. Powell & Co., Inc. .



MODEL TS

FLOOR TO FLOOR WITH TOPPING SLAB

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|----------|--------------|------------------|------------------|
| TS - 1 | 1" (25.40) | 2" (50.80) | 4" (101.60) |
| TS - 2 | 2" (50.80) | 4" (101.60) | 6" (152.40) |
| TS - 3 | 3" (76.20) | 4 1/2" (114.30) | 6 1/2" (156.10) |
| TS - 3-3 | 3" (76.20) | 6" (152.40) | 8" (203.20) |
| TS - 4 | 4" (101.60) | 6" (152.40) | 8" (203.20) |
| TS - 4-4 | 4" (101.60) | 8" (203.20) | 10" (254.00) |
| TS - 5 | 5" (127.00) | 7 1/2" (190.50) | 9 1/2" (241.30) |
| TS - 5-5 | 5" (127.00) | 10" (254.00) | 12" (304.80) |
| TS - 6 | 6" (152.40) | 9" (228.60) | 11" (279.40) |
| TS - 6-6 | 6" (152.40) | 12" (304.80) | 14" (355.60) |
| TS - 7 | 7" (177.80) | 10 1/2" (266.70) | 12 1/2" (317.50) |
| TS - 7-7 | 7" (177.80) | 14" (355.60) | 16" (406.40) |
| TS - 8 | 8" (203.20) | 12" (304.80) | 14" (355.60) |
| TS - 8-8 | 8" (203.20) | 16" (406.40) | 18" (457.20) |
| TS - 9 | 9" (228.60) | 13 1/2" (342.90) | 15 1/2" (393.70) |
| TS - 9-9 | 9" (228.60) | 18" (457.20) | 20" (508.00) |
| TS - 10 | 10" (254.00) | 15" (381.00) | 17" (431.80) |

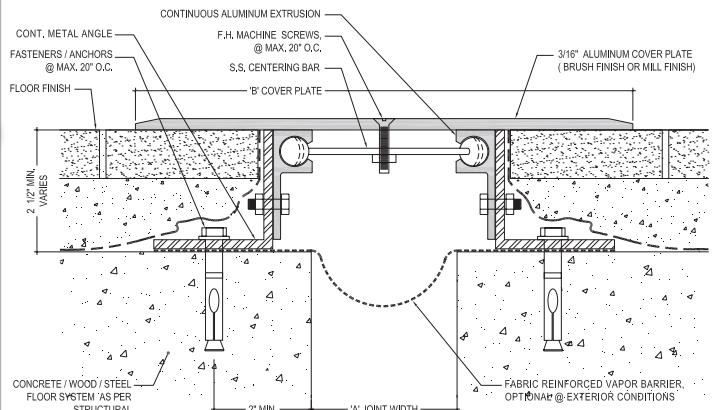


'B' - Cover Plate = 'A' Void + Movement + 2"

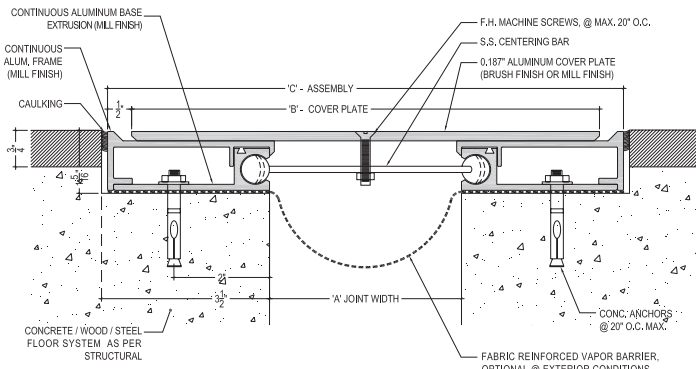
TSL (Corner condition) Available for Floor to Wall expansion joints.

Contact M.H. Powell & Co., for clarifications.

For movements greater than 50% consult M.H. Powell & Co., Inc. .



MODEL NB FLOOR TO FLOOR (EXISTING / NEW) - NO BUMP



| MODEL | 'A'-VOID | MAX. OPENING | 'C' - ASSEMBLY |
|--------|-------------|--------------|------------------|
| NB - 2 | 2" (50.80) | 7" (177.80) | 8 3/4" (222.00) |
| NB - 3 | 3" (76.20) | 8" (203.20) | 9 3/4" (247.50) |
| NB - 4 | 4" (101.60) | 9" (228.60) | 10 3/4" (273.00) |
| NB - 5 | 5" (127.00) | 10" (254.00) | 11 3/4" (298.50) |
| NB - 6 | 6" (152.40) | 11" (279.40) | 12 3/4" (324.00) |
| NB - 7 | 7" (177.80) | 12" (304.80) | 13 3/4" (349.00) |
| NB - 8 | 8" (203.20) | 13" (330.20) | 14 3/4" (362.00) |

Max. Opening = 'A' Void + 5"
'C' Assembly = 'A' Void + (2 x 3 3/8")

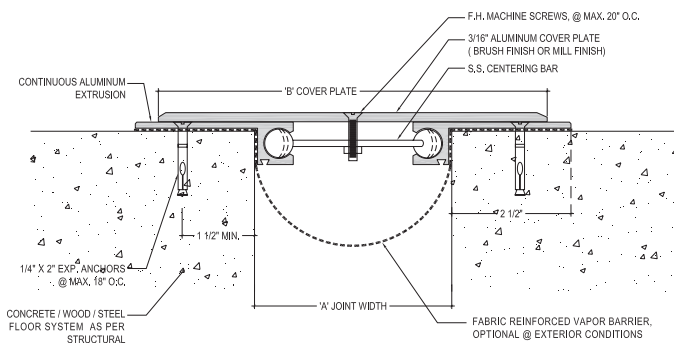
NB - No Bump system is in compliance with **ADA** requirements, providing a smooth transition from floor to floor.

Model **NBL** - Floor to Wall joint cover system is available for corner conditions.

NB Floor joint system is ideal for hospitals and rolling traffic (non-auto)

10" and over = Custom Fabricated
(Provide joint separation and structural movement when detailing.)

MODEL XX FLOOR TO FLOOR (EXISTING TO EXISTING)

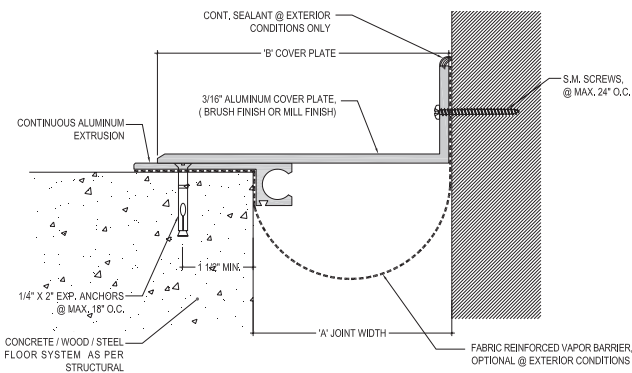


'B' - Cover Plate = 'A' Void + Movement
Contact M.H. Powell & Co., Inc. for 2" wide or less seismic joints.

Consult factory for movements greater than 50%.

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|----------|--------------|------------------|------------------|
| XX - 3 | 3" (76.20) | 4 1/2" (114.30) | 4 1/2" (114.30) |
| XX - 3-3 | 3" (76.20) | 6" (152.40) | 6" (152.40) |
| XX - 4 | 4" (101.60) | 6" (152.40) | 6" (152.40) |
| XX - 4-4 | 4" (101.60) | 8" (203.20) | 8" (203.20) |
| XX - 5 | 5" (127.00) | 7 1/2" (190.50) | 7 1/2" (190.50) |
| XX - 5-5 | 5" (127.00) | 10" (254.00) | 10" (254.00) |
| XX - 6 | 6" (152.40) | 9" (228.60) | 9" (228.60) |
| XX - 6-6 | 6" (152.40) | 12" (304.80) | 12" (304.80) |
| XX - 7 | 7" (177.80) | 10 1/2" (266.70) | 10 1/2" (266.70) |
| XX - 7-7 | 7" (177.80) | 14" (355.60) | 14" (355.60) |
| XX - 8 | 8" (203.20) | 12" (304.80) | 12" (304.80) |
| XX - 8-8 | 8" (203.20) | 16" (406.40) | 16" (406.40) |
| XX - 9 | 9" (228.60) | 13 1/2" (342.90) | 13 1/2" (342.90) |
| XX - 9-9 | 9" (228.60) | 18" (457.20) | 18" (457.20) |
| XX - 10 | 10" (254.00) | 15" (381.00) | 15" (381.00) |

MODEL XXL FLOOR TO WALL (EXISTING TO EXISTING)



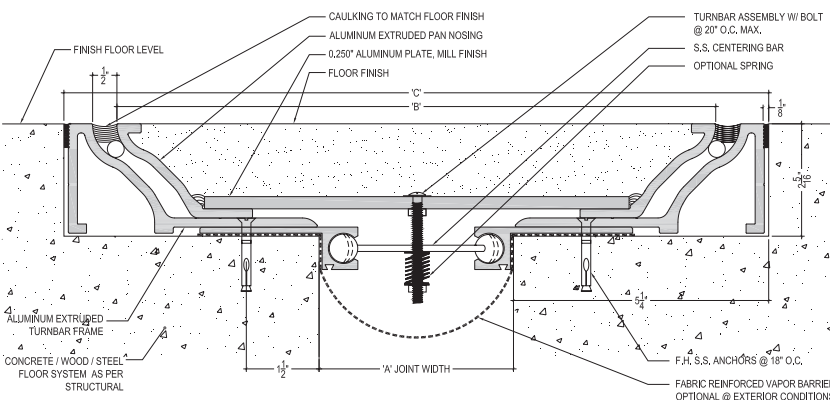
'B' - Cover Plate = 'A' Void + Movement

Model **XXL** can be used for floor to wall corner conditions.

Consult factory for movements greater than 50%.

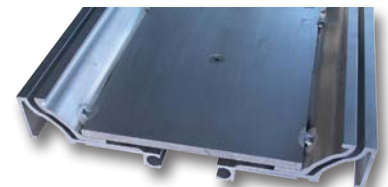
| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|-----------|--------------|------------------|------------------|
| XXL - 3 | 3" (76.20) | 4 1/2" (114.30) | 4 1/2" (114.30) |
| XXL - 3-3 | 3" (76.20) | 6" (152.40) | 6" (152.40) |
| XXL - 4 | 4" (101.60) | 6" (152.40) | 6" (152.40) |
| XXL - 4-4 | 4" (101.60) | 8" (203.20) | 8" (203.20) |
| XXL - 5 | 5" (127.00) | 7 1/2" (190.50) | 7 1/2" (190.50) |
| XXL - 5-5 | 5" (127.00) | 10" (254.00) | 10" (254.00) |
| XXL - 6 | 6" (152.40) | 9" (228.60) | 9" (228.60) |
| XXL - 6-6 | 6" (152.40) | 12" (304.80) | 12" (304.80) |
| XXL - 7 | 7" (177.80) | 10 1/2" (266.70) | 10 1/2" (266.70) |
| XXL - 7-7 | 7" (177.80) | 14" (355.60) | 14" (355.60) |
| XXL - 8 | 8" (203.20) | 12" (304.80) | 12" (304.80) |
| XXL - 8-8 | 8" (203.20) | 16" (406.40) | 16" (406.40) |
| XXL - 9 | 9" (228.60) | 13 1/2" (342.90) | 13 1/2" (342.90) |
| XXL - 9-9 | 9" (228.60) | 18" (457.20) | 18" (457.20) |
| XXL - 10 | 10" (254.00) | 15" (381.00) | 15" (381.00) |

MODEL PU FLOOR TO FLOOR (POP UP - NO BUMP)



Model **PUL** can be used for floor to wall expansion joints. Refer **Custom Floor Joint Systems** (Pg. 13) for more data.

Contact M.H.Powell & Co., Inc. for custom and project specific floor joint systems to match various architectural and structural requirements.



Model **PU** - Pop-up Floor Joint system can be used as an ADA compliant No- Bump Floor to Floor transition. Floor finish can be applied over the Cover plate making the joint cover nearly invisible and providing smooth flow of floor finish.

Heavy Duty Floor Joints

M. H. Powell & Co., Inc. provides a series of seismic expansion joint covers to meet auto load and impacts. These heavy duty floor joint systems are designed to match most structural and design intent.

Due to auto traffic and constant heavy impact, the **PTHDS**, **PTHDXW**, **PTHDS**, **HDCIP** and **HDEXW** models are incorporated with cast in place anchors which allow proper placement in post tension concrete floor systems.

This adjustable anchoring system requires project field coordination for proper installation.



MODEL HDCIP

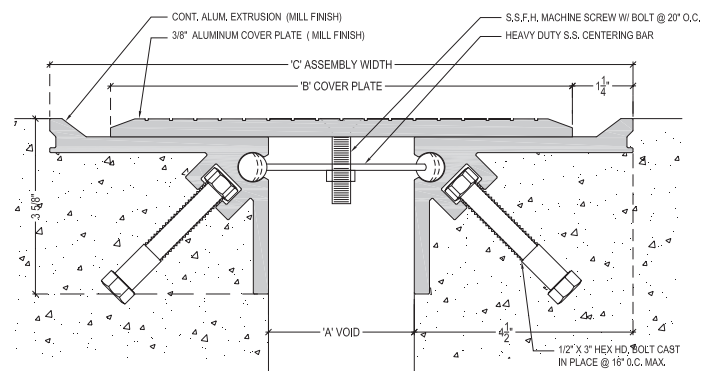
| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER | Floor (Ex'g/New) to Floor (Ex'g/ New) |
|-----------|-------------|--------------|------------------|---|
| HDCIP - 4 | 4" (101.60) | 50% (2") | 10 1/2" (266.70) | |
| HDCIP - 5 | 5" (127.00) | 50% (2 1/2") | 11 1/2" (292.10) | |
| HDCIP - 6 | 6" (152.40) | 50% (3") | 12 1/2" (317.50) | Consult M.H. Powell & Co., Inc. for movements greater than 50% of seismic void. |
| HDCIP - 7 | 7" (177.80) | 50% (3 1/2") | 13 1/2" (342.90) | |

C' - Assembly width = 'A' Void + (2 x 4 1/2")
B' - Cover Plate = 'A' + 9" - (2 1/2")



A cast in place heavy duty parking structure seismic joint cover system designed for H-20 loading.

Allow for construction up to 7" wide seismic joints.



Cover Plate thickness varies to meet Auto load requirements and joint widths

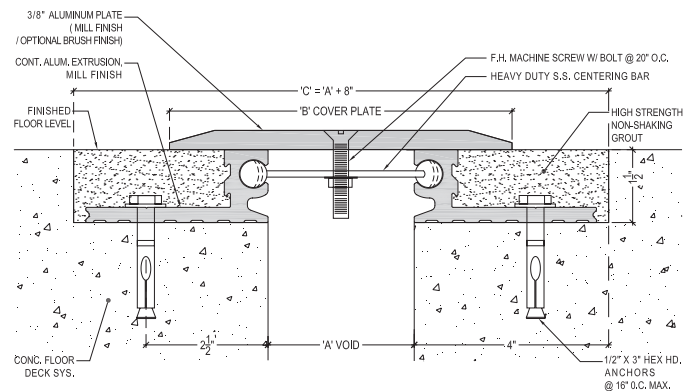
MODEL BOHD

| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER | Floor (Ex'g/New) to Floor (Ex'g/ New) |
|----------|-------------|--------------|------------------|---|
| BOHD - 4 | 4" (101.60) | 50% (2") | 8" (203.20) | |
| BOHD - 5 | 5" (127.00) | 50% (2 1/2") | 9 1/2" (241.30) | |
| BOHD - 6 | 6" (152.40) | 50% (3") | 11" (279.40) | Consult M.H. Powell & Co., Inc. for movements greater than 50% of seismic void. |
| BOHD - 7 | 7" (177.80) | 50% (3 1/2") | 12 1/2" (217.50) | |
| BOHD - 8 | 8" (203.20) | 50% (4") | 14" (355.60) | |
| BOHD - 9 | 9" (228.60) | 50% (4 1/2") | 15 1/2" (393.70) | |

C' - Assembly width = 'A' Void + (2x4")
B' Cover Plate = 'A' Void + ('A' x Move %) + 2"

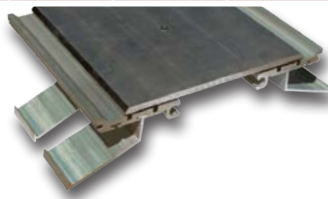


BOHDL - Floor to wall seismic joint cover available. Contact M.H. Powell & Co., Inc. for a wider range of options.

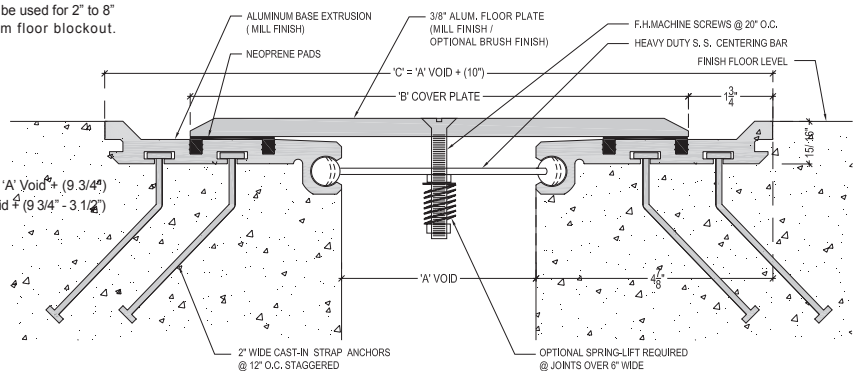


MODEL PTHDS

| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER | PTHDS Model can be used for 2" to 8" joints with minimum floor blockout. |
|-----------|-------------|--------------|-----------------|--|
| PTHDS - 2 | 2" (50.80) | 50% (1") | 8.25" (209.55) | |
| PTHDS - 3 | 3" (76.20) | 50% (1 1/2") | 9.25" (234.95) | |
| PTHDS - 4 | 4" (101.60) | 50% (2") | 10.25" (260.35) | |
| PTHDS - 5 | 5" (127.00) | 50% (2 1/2") | 11.25" (285.75) | |
| PTHDS - 6 | 6" (152.40) | 50% (3") | 12.25" (311.15) | |



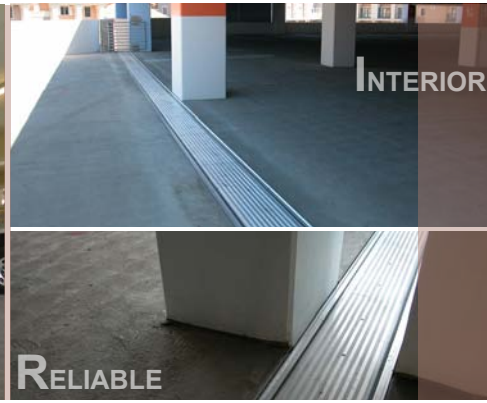
C' Assembly width = 'A' Void + (9 3/4")
B' Cover Plate = 'A' Void + (9 3/4" - 3 1/2")



AESTHETICALLY PLEASING



INTERIOR

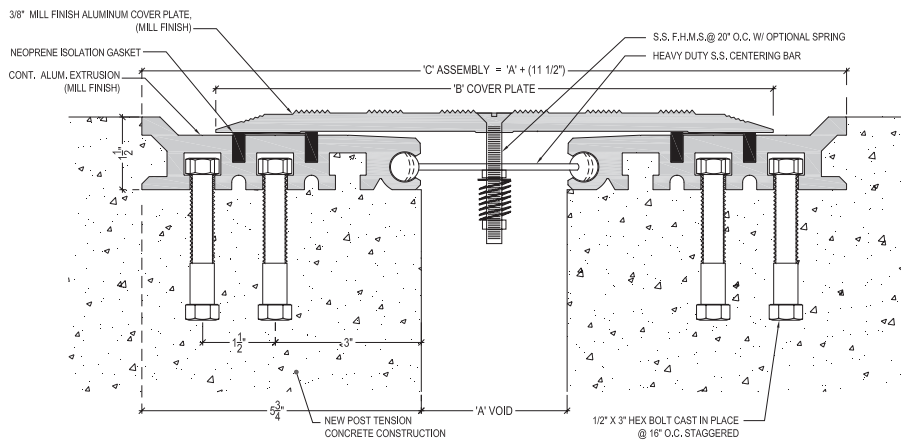


RELIABLE

EXTERIOR

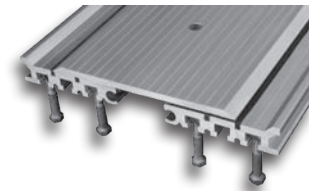


MODEL PTHD



| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER |
|----------|-------------|--------------|------------------|
| PTHD - 4 | 4" (101.60) | 50% (2") | 11 1/2" (292.10) |
| PTHD - 5 | 5" (127.00) | 50% (2 1/2") | 12 1/2" (317.50) |
| PTHD - 6 | 6" (152.40) | 50% (3") | 13 1/2" (342.90) |
| PTHD - 7 | 7" (177.80) | 50% (3 1/2") | 14 1/2" (368.30) |
| PTHD - 8 | 8" (203.20) | 50% (4") | 15 1/2" (393.70) |
| PTHD - 9 | 9" (228.60) | 50% (4 1/2") | 16 1/2" (419.10) |

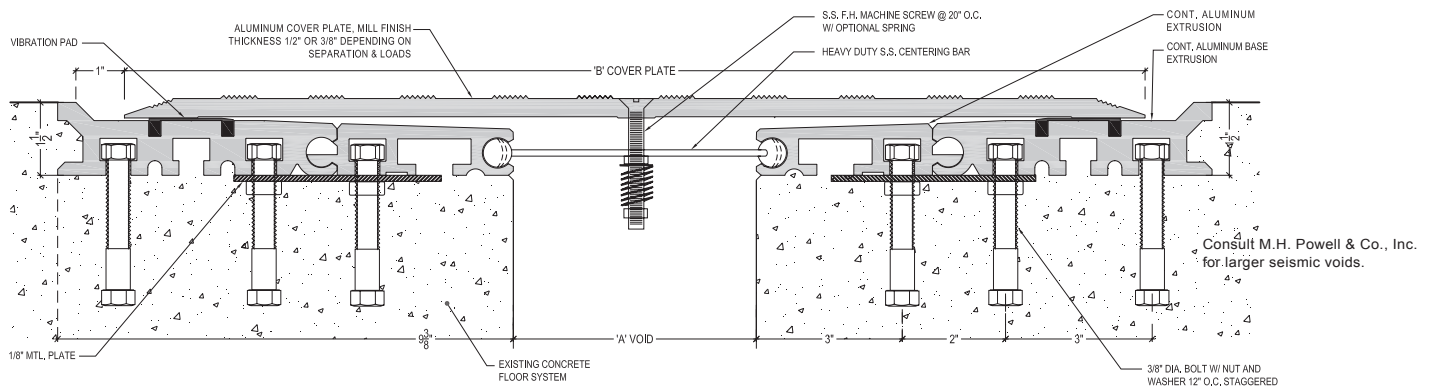
'C' - Assembly Width = 'A' Void + (2 x 5 3/4")
'B' - Cover Plate = 'A' Void + (2 x 5 3/4") - 4"



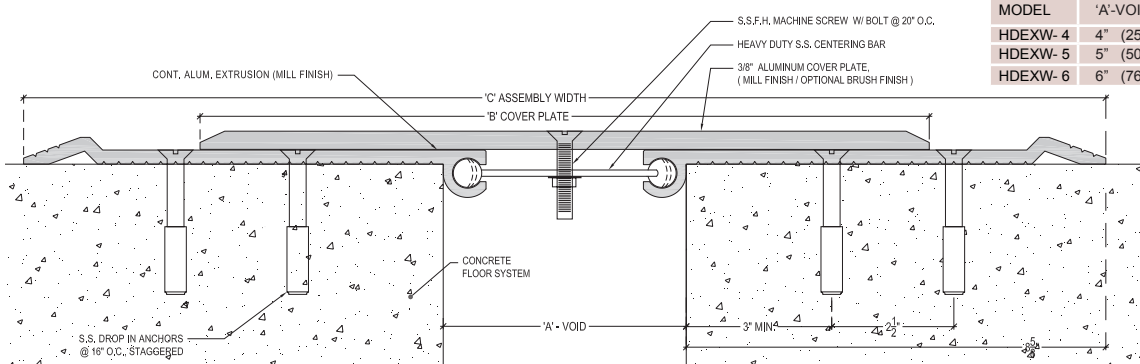
A cast in place joint H-20 loading system designed for post tension concrete construction. Accommodate vertical, horizontal and lateral displacements along with post tension shrinkage.

Note: Provide seismic void and projected concrete shrinkage when specifying.

MODEL PTHDXW (EXTRA WIDE)



MODEL HDEXW (EXTRA WIDE)



| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER |
|----------|------------|--------------|--------------|
| HDEXW- 4 | 4" (25.40) | 50% (2") | 14" (355.60) |
| HDEXW- 5 | 5" (50.80) | 50% (2 1/2") | 15" (381.00) |
| HDEXW- 6 | 6" (76.20) | 50% (3") | 16" (406.40) |

Consult M.H. Powell & Co., Inc. for larger seismic voids.

Floor (Existing) to Floor (Existing)

Cover Plate thickness varies to meet Auto load requirements and joint widths

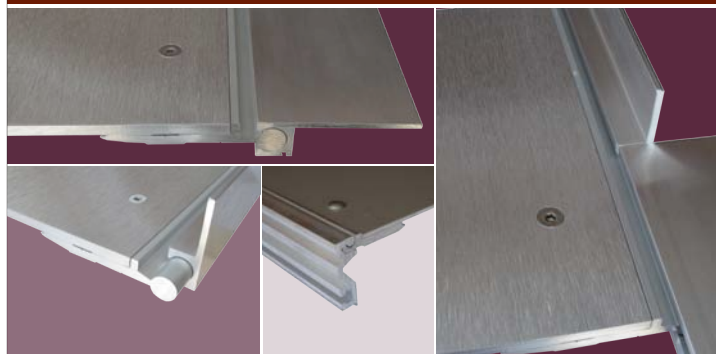
MODEL - HDEXW
Suitable for existing seismic joints

Rotation - Hinged Floor Plates

M.H. Powell & Co., Inc. with its innovative technical approach is capable of providing a wide range of custom fabricated and project specific seismic design solutions.

Custom floor joint systems offer more advanced technical properties in a user friendly design.

- Applicable for both new and existing conditions.
- Clean lines and variety of finishes.
- Capability of handling 100% seismic movements.
- Accommodate seismic openings.



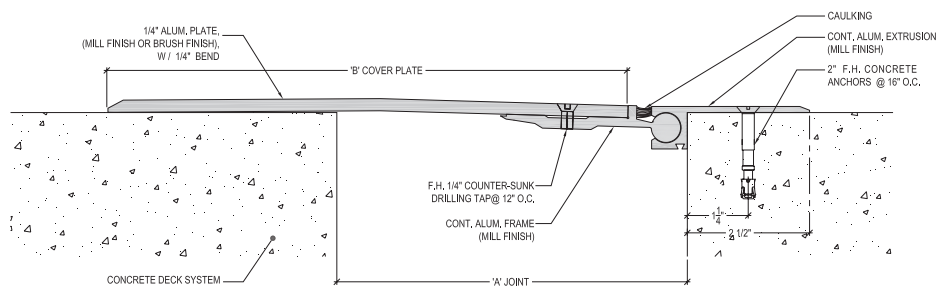
MODEL ALFF

CUSTOM MODEL FLOOR TO FLOOR

| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER |
|-----------|--------------|--------------|------------------|
| ALFF - 5 | 5" (127.00) | 50% (2 1/2") | 8 1/2" (215.90) |
| ALFF - 6 | 6" (152.40) | 50% (3") | 10" (254.00) |
| ALFF - 7 | 7" (177.80) | 50% (3 1/2") | 11 1/2" (292.10) |
| ALFF - 8 | 8" (203.20) | 50% (4") | 13" (330.20) |
| ALFF - 9 | 9" (228.60) | 50% (4 1/2") | 14 1/2" (368.30) |
| ALFF - 10 | 10" (254.00) | 50% (5") | 16" (406.40) |



Model **ALFF** can be used for a larger range of seismic openings. Consult M.H.Powell & Co., Inc. for more custom options.



$$'B' - \text{Cover Plate} = 'A' \text{ Void} + ('A' \times \text{Movement } \%) + 1"$$

*Aluminum cover plate thickness to vary with seismic joint width 'A'

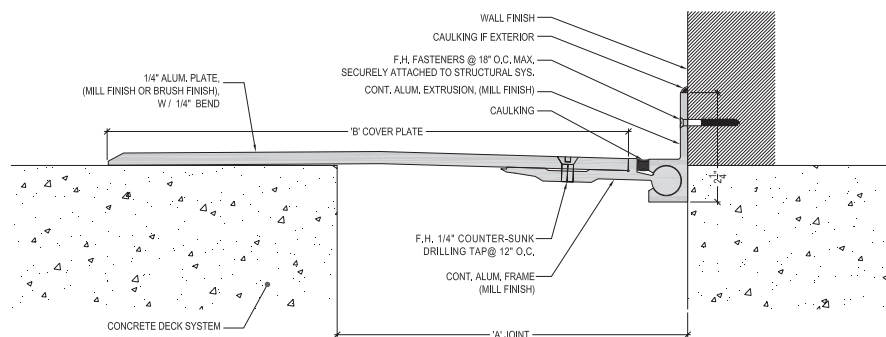
MODEL ALFW

CUSTOM MODEL FLOOR TO WALL

| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER |
|-----------|--------------|--------------|------------------|
| ALFW - 5 | 5" (127.00) | 50% (2 1/2") | 8 1/2" (215.90) |
| ALFW - 6 | 6" (152.40) | 50% (3") | 10" (254.00) |
| ALFW - 7 | 7" (177.80) | 50% (3 1/2") | 11 1/2" (292.10) |
| ALFW - 8 | 8" (203.20) | 50% (4") | 13" (330.20) |
| ALFW - 9 | 9" (228.60) | 50% (4 1/2") | 14 1/2" (368.30) |
| ALFW - 10 | 10" (254.00) | 50% (5") | 16" (406.40) |



Model **ALFW** can be used for floor to wall conditions.



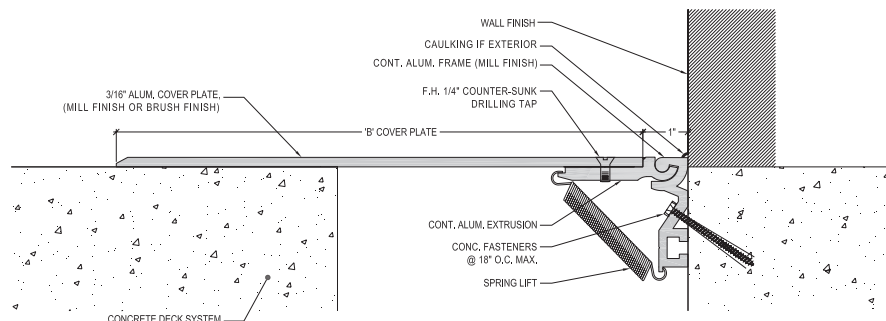
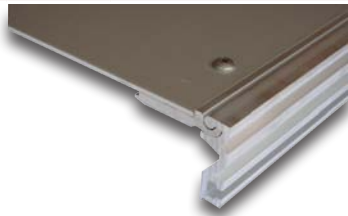
$$'B' - \text{Cover Plate} = 'A' \text{ Void} + ('A' \times \text{Movement } \%) + 1"$$

*Aluminum cover plate thickness to vary with seismic joint width 'A'

MODEL PHFW AND PHFF

CUSTOM MODEL FLOOR TO WALL

| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER |
|-----------|--------------|--------------|------------------|
| PHFW - 5 | 5" (127.00) | 50% (2 1/2") | 8 1/2" (215.90) |
| PHFW - 6 | 6" (152.40) | 50% (3") | 10" (254.00) |
| PHFW - 7 | 7" (177.80) | 50% (3 1/2") | 11 1/2" (292.10) |
| PHFW - 8 | 8" (203.20) | 50% (4") | 13" (330.20) |
| PHFW - 9 | 9" (228.60) | 50% (4 1/2") | 14 1/2" (368.30) |
| PHFW - 10 | 10" (254.00) | 50% (5") | 16" (406.40) |



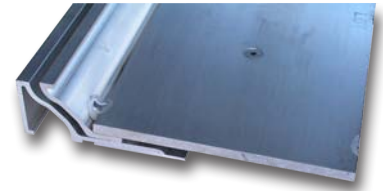
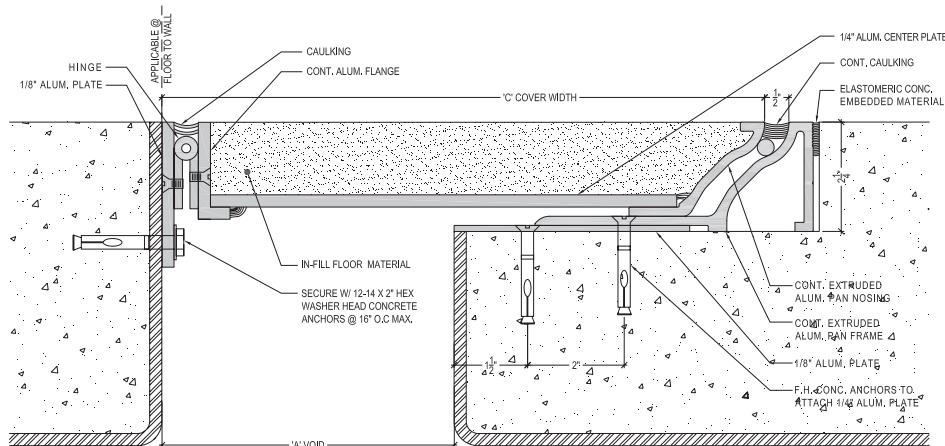
$$'B' - \text{Cover Plate} = 'A' \text{ Void} + ('A' \times \text{Movement } \%) + 1"$$

*Aluminum cover plate thickness to vary with seismic joint width 'A'

Model **PHFF** is available for floor to floor expansion joints. Contact M.H. Powell & Co., Inc. for more details and custom design solutions.

MODEL PUL

CUSTOM FLOOR MODEL



Model PUL is specifically designed to incorporate various architectural floor finishes. This model is in line with Model PU-Floor to Floor joint system.

Model PUL can be used in both floor to floor and floor to wall conditions.

Contact M.H. Powell & Co., Inc. for more details.

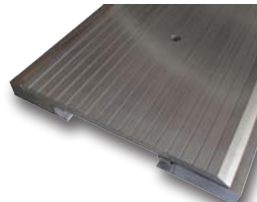
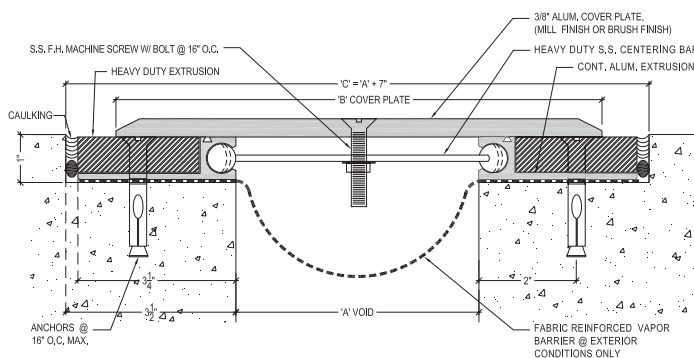
FLOOR CUSTOM HEAVY DUTY

M. H. Powell & Co., Inc. offers custom floor joints to meet auto - traffic requirements. Each model is designed to cater project specific seismic expansion joint conditions.

With proper analysis of architectural & structural drawings and field conditions the company is ready to meet the challenges to develop new models and systems to match project requirements.

MODEL HD

FLOOR (EX'G / NEW) TO FLOOR (EX'G / NEW)



*Aluminum cover plate thickness varies with seismic joint width 'A'

| MODEL | 'A'-VOID | MOVEMENT | 'B'-COVER |
|----------|-------------|--------------|------------------|
| HD - 4 | 4" (101.60) | 50% (2") | 8" (203.20) |
| HD - 4-4 | 4" (101.60) | 100% (4") | 10" (254.00) |
| HD - 5 | 5" (127.00) | 50% (2 1/2") | 9 1/2" (241.30) |
| HD - 5-5 | 5" (127.00) | 100% (5") | 12" (304.80) |
| HD - 6 | 6" (152.40) | 50% (3") | 11" (279.40) |
| HD - 6-6 | 6" (152.40) | 100% (6") | 14" (355.60) |
| HD - 7 | 7" (177.80) | 50% (3 1/2") | 12 1/2" (317.50) |
| HD - 7-7 | 7" (177.80) | 100% (7") | 16" (406.40) |
| HD - 8 | 8" (203.20) | 50% (4") | 14" (355.60) |
| HD - 8-8 | 8" (203.20) | 100% (8") | 18" (457.20) |
| HD - 9 | 9" (228.60) | 50% (4 1/2") | 15 1/2" (393.70) |

'C' - Assembly width = 'A' Void + (2 x 3 1/2")

'B' - Cover Plate = 'A' Void + (A x Movement %) + 2"

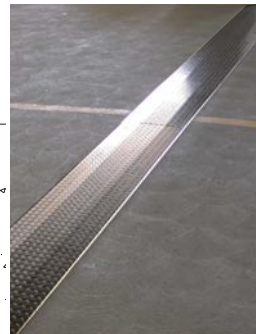
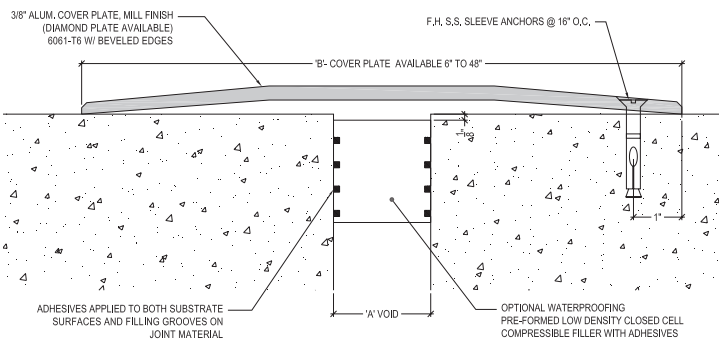
MODEL - HDL

Available for floor to wall seismic joint covers.

Consult M.H. Powell & Co., Inc. for larger seismic voids.

MODEL PHEV

FLOOR (EX'G / NEW) TO FLOOR (EX'G / NEW)



PHEV - Floor (Existing) to Floor (Existing)

'No Frills' Auto Traffic Thresholds with pre-formed low density closed compressible filler with adhesives.

Assembly is available for up to 6" wide joints.

Consult M.H. Powell & Co., Inc. for larger seismic separations.

Model PHEVL - Floor (Ex'g/ New) to Wall available.

*Aluminum cover plate thickness varies with seismic joint width 'A'

Aluminum Roof Joint Covers

M. H. Powell & Co., Inc. provides a variety of seismic expansion joint covers for roofs to match different project specific conditions.

Aluminum roof cover systems can be custom fabricated to match maximum seismic movements at each given condition.

The adjustability of the fabricated Aluminum cover plate provides the required movement capability without modifying any other assembly component.

Aluminum roof joint systems offers different mounting methods to match both new and existing conditions.

* Aluminum roof cover plate thickness varies to match seismic joint width.

MODEL RR ROOF TO ROOF

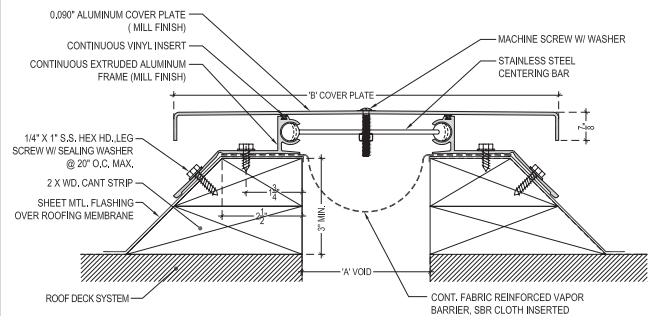
| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|----------|--------------|------------------|--------------|
| RR - 2 | 2" (50.80) | 4" (101.60) | 10" (254.00) |
| RR - 3 | 3" (76.20) | 4 1/2" (114.30) | 11" (279.40) |
| RR - 3-3 | 3" (76.20) | 6" (152.40) | 11" (279.40) |
| RR - 4 | 4" (101.60) | 6" (152.40) | 12" (304.80) |
| RR - 4-4 | 4" (101.60) | 8" (203.20) | 12" (304.80) |
| RR - 5 | 5" (127.00) | 7 1/2" (190.50) | 13" (330.20) |
| RR - 5-5 | 5" (127.00) | 10" (254.00) | 13" (330.20) |
| RR - 6 | 6" (152.40) | 9" (228.60) | 14" (355.60) |
| RR - 6-6 | 6" (152.40) | 12" (304.80) | 14" (355.60) |
| RR - 7 | 7" (177.80) | 10 1/2" (266.70) | 15" (381.00) |
| RR - 7-7 | 7" (177.80) | 14" (355.60) | 16" (406.40) |
| RR - 8 | 8" (203.20) | 12" (304.80) | 16" (406.40) |
| RR - 8-8 | 8" (203.20) | 16" (406.40) | 18" (457.20) |
| RR - 9 | 9" (228.60) | 13 1/2" (342.90) | 17" (431.80) |
| RR - 9-9 | 9" (228.60) | 18" (457.20) | 20" (508.00) |
| RR - 10 | 10" (254.00) | 15" (381.00) | 18" (457.20) |

Consult M.H. Powell & Co., Inc. for joints greater than 10".



Model RR Aluminum roof joint cover system is widely applicable on most roof joints. Adjustable Aluminum frame provides wide range of mounting options.

'B' - Cover Plate Width = 'A' Void + (Movement) + 2"
Min. 'B' = 'A' Void + (2 x 4")
Apply the greater value



MODEL RPP ROOF PARAPET TO ROOF PARAPET

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|-----------|--------------|------------------|--------------|
| RPP - 2 | 2" (50.80) | 4" (101.60) | 10" (254.00) |
| RPP - 3 | 3" (76.20) | 4 1/2" (114.30) | 11" (279.40) |
| RPP - 3-3 | 3" (76.20) | 6" (152.40) | 11" (279.40) |
| RPP - 4 | 4" (101.60) | 6" (152.40) | 12" (304.80) |
| RPP - 4-4 | 4" (101.60) | 8" (203.20) | 12" (304.80) |
| RPP - 5 | 5" (127.00) | 7 1/2" (190.50) | 13" (330.20) |
| RPP - 5-5 | 5" (127.00) | 10" (254.00) | 13" (330.20) |
| RPP - 6 | 6" (152.40) | 9" (228.60) | 14" (355.60) |
| RPP - 6-6 | 6" (152.40) | 12" (304.80) | 14" (355.60) |
| RPP - 7 | 7" (177.80) | 10 1/2" (266.70) | 15" (381.00) |
| RPP - 7-7 | 7" (177.80) | 14" (355.60) | 16" (406.40) |
| RPP - 8 | 8" (203.20) | 12" (304.80) | 16" (406.40) |
| RPP - 8-8 | 8" (203.20) | 16" (406.40) | 18" (457.20) |
| RPP - 9 | 9" (228.60) | 13 1/2" (342.90) | 17" (431.80) |
| RPP - 9-9 | 9" (228.60) | 18" (457.20) | 20" (508.00) |
| RPP - 10 | 10" (254.00) | 15" (381.00) | 18" (457.20) |

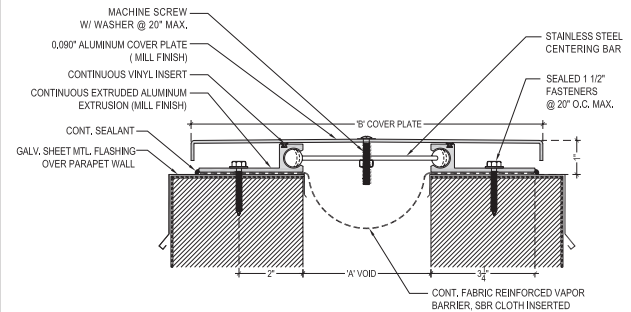
Consult M.H. Powell & Co., Inc. for joints greater than 10".



Model RPP Aluminum roof joint system is applicable where wide roof curbs or parapet conditions exist.

No additional framing required for mounting model extrusions on substrate.

'B' - Cover Plate Width = 'A' Void + (Movement) + 2"
Min. 'B' = 'A' Void + (2 x 4")
Apply the greater value.



MODEL CRR ROOF TO ROOF - METAL ROOFING

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|-----------|--------------|------------------|------------------|
| CRR - 2 | 2" (50.80) | 4" (101.60) | 8" (203.20) |
| CRR - 3 | 3" (76.20) | 4 1/2" (114.30) | 8 1/2" (215.90) |
| CRR - 3-3 | 3" (76.20) | 6" (152.40) | 10" (254.00) |
| CRR - 4 | 4" (101.60) | 6" (152.40) | 10" (254.00) |
| CRR - 4-4 | 4" (101.60) | 8" (203.20) | 12" (304.80) |
| CRR - 5 | 5" (127.00) | 7 1/2" (190.50) | 11 1/2" (292.10) |
| CRR - 5-5 | 5" (127.00) | 10" (254.00) | 14" (355.60) |
| CRR - 6 | 6" (152.40) | 9" (228.60) | 13" (330.20) |
| CRR - 6-6 | 6" (152.40) | 12" (304.80) | 16" (406.40) |
| CRR - 7 | 7" (177.80) | 10 1/2" (266.70) | 14 1/2" (368.30) |
| CRR - 7-7 | 7" (177.80) | 14" (355.60) | 18" (457.20) |
| CRR - 8 | 8" (203.20) | 12" (304.80) | 16" (406.40) |
| CRR - 8-8 | 8" (203.20) | 16" (406.40) | 20" (508.00) |
| CRR - 9 | 9" (228.60) | 13 1/2" (342.90) | 17 1/2" (444.50) |
| CRR - 9-9 | 9" (228.60) | 18" (457.20) | 22" (558.80) |
| CRR - 10 | 10" (254.00) | 15" (381.00) | 19" (482.60) |

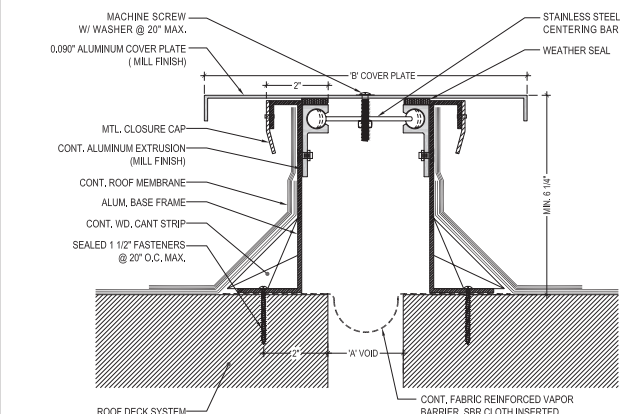
Consult M.H. Powell & Co., Inc. for joints greater than 10".



Model CRR suits where the joint cover needs to be elevated from roofing system. Applicable on Metal, Tile or any other complex roofing systems.

'B' - Cover Plate Width = 'A' Void + (Movement) + 4"
Min. 'B' = 'A' Void + (2 x 3")
Apply the greater value.

Consult M.H. Powell & Co., Inc. for joints greater than 10".





Every model is available to match both Roof to Roof conditions and Roof to Wall conditions.

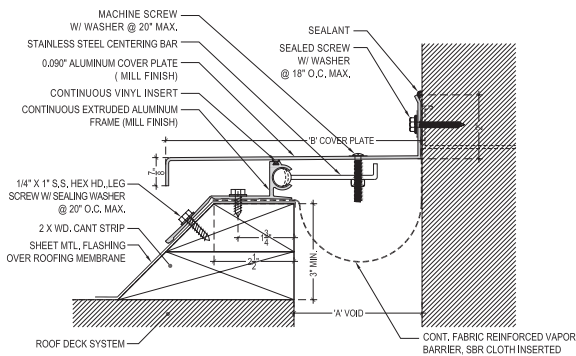
Roof to Roof Models - **RR** - Roof to Roof (With cant strip)
RPP - Roof Parapet to Roof Parapet
CRR - Roof to Roof (Tile, Metal roofs)

Roof To Wall Models - **RW** - Roof to Wall (With cant strip)
RPW - Roof Parapet to Wall
CRW - Roof to Wall (Tile, metal roofs)

Note: Custom modifications available for various field conditions.

MODEL RW

ROOF TO WALL



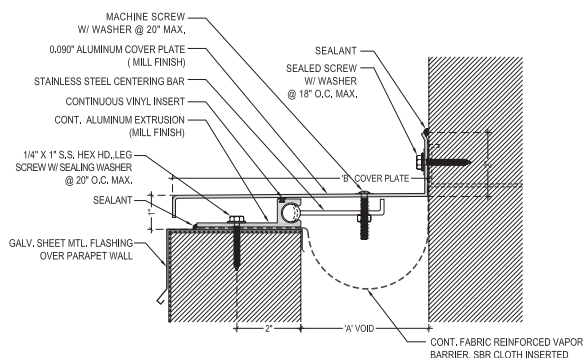
Model RW is applicable where roof to wall joint condition occurs.

'B' = 'A' Void + (Movement) + 1"
 Min. 'B' = 'A' Void + (4")
 Apply the greater value

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|----------|--------------|------------------|------------------|
| RW - 2 | 2" (50.80) | 4" (101.60) | 6" (152.40) |
| RW - 3 | 3" (76.20) | 4 1/2" (114.30) | 7" (177.80) |
| RW - 3-3 | 3" (76.20) | 6" (152.40) | 7" (177.80) |
| RW - 4 | 4" (101.60) | 6" (152.40) | 8" (203.20) |
| RW - 4-4 | 4" (101.60) | 8" (203.20) | 9" (228.60) |
| RW - 5 | 5" (127.00) | 7 1/2" (190.50) | 9" (228.60) |
| RW - 5-5 | 5" (127.00) | 10" (254.00) | 11" (279.40) |
| RW - 6 | 6" (152.40) | 9" (228.60) | 10" (254.00) |
| RW - 6-6 | 6" (152.40) | 12" (304.80) | 13" (330.20) |
| RW - 7 | 7" (177.80) | 10 1/2" (266.70) | 11 1/2" (292.10) |
| RW - 7-7 | 7" (177.80) | 14" (355.60) | 15" (381.00) |
| RW - 8 | 8" (203.20) | 12" (304.80) | 13" (330.20) |
| RW - 8-8 | 8" (203.20) | 16" (406.40) | 17" (431.80) |
| RW - 9 | 9" (228.60) | 13 1/2" (342.90) | 14 1/2" (368.30) |
| RW - 9-9 | 9" (228.60) | 18" (457.20) | 19" (482.60) |
| RW - 10 | 10" (254.00) | 15" (381.00) | 16" (406.40) |

MODEL RPW

ROOF PARAPET TO ROOF



Model RPW is applicable where wide roof curbs or parapet conditions exist at roof joints against a wall.

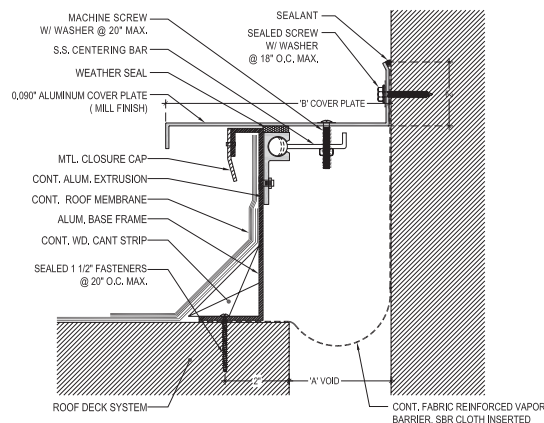
No additional framing required for model extrusion mounting on substrate.

'B' = 'A' Void + (Movement) + 1"
 Min. 'B' = 'A' Void + (4")
 Apply the greater value.

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|-----------|--------------|------------------|------------------|
| RPW - 2 | 2" (50.80) | 4" (101.60) | 6" (152.40) |
| RPW - 3 | 3" (76.20) | 4 1/2" (114.30) | 7" (177.80) |
| RPW - 3-3 | 3" (76.20) | 6" (152.40) | 7" (177.80) |
| RPW - 4 | 4" (101.60) | 6" (152.40) | 8" (203.20) |
| RPW - 4-4 | 4" (101.60) | 8" (203.20) | 9" (228.60) |
| RPW - 5 | 5" (127.00) | 7 1/2" (190.50) | 9" (228.60) |
| RPW - 5-5 | 5" (127.00) | 10" (254.00) | 11" (279.40) |
| RPW - 6 | 6" (152.40) | 9" (228.60) | 10" (254.00) |
| RPW - 6-6 | 6" (152.40) | 12" (304.80) | 13" (330.20) |
| RPW - 7 | 7" (177.80) | 10 1/2" (266.70) | 11 1/2" (292.10) |
| RPW - 7-7 | 7" (177.80) | 14" (355.60) | 15" (381.00) |
| RPW - 8 | 8" (203.20) | 12" (304.80) | 13" (330.20) |
| RPW - 8-8 | 8" (203.20) | 16" (406.40) | 17" (431.80) |
| RPW - 9 | 9" (228.60) | 13 1/2" (342.90) | 14 1/2" (368.30) |
| RPW - 9-9 | 9" (228.60) | 18" (457.20) | 19" (482.60) |
| RPW - 10 | 10" (254.00) | 15" (381.00) | 16" (406.40) |

MODEL CRW

ROOF TO WALL - METAL ROOFING



Model CRW is applicable when roof to wall joint conditions occur.

'B' = 'A' Void + (Movement) + 2"
 Min. 'B' = 'A' Void + (3")
 Apply the greater value.

Consult M.H. Powell & Co., Inc. for joints greater than 10".

| MODEL | 'A'-VOID | MAX. OPENING | 'B'-COVER |
|-----------|--------------|------------------|------------------|
| CRW - 2 | 2" (50.80) | 4" (101.60) | 6" (152.40) |
| CRW - 3 | 3" (76.20) | 4 1/2" (114.30) | 6 1/2" (165.10) |
| CRW - 3-3 | 3" (76.20) | 6" (152.40) | 8" (203.20) |
| CRW - 4 | 4" (101.60) | 6" (152.40) | 8" (203.20) |
| CRW - 4-4 | 4" (101.60) | 8" (203.20) | 10" (254.00) |
| CRW - 5 | 5" (127.00) | 7 1/2" (190.50) | 9 1/2" (241.30) |
| CRW - 5-5 | 5" (127.00) | 10" (254.00) | 12" (304.80) |
| CRW - 6 | 6" (152.40) | 9" (228.60) | 11" (279.40) |
| CRW - 6-6 | 6" (152.40) | 12" (304.80) | 14" (355.60) |
| CRW - 7 | 7" (177.80) | 10 1/2" (266.70) | 12 1/2" (317.50) |
| CRW - 7-7 | 7" (177.80) | 14" (355.60) | 16" (406.40) |
| CRW - 8 | 8" (203.20) | 12" (304.80) | 14" (355.60) |
| CRW - 8-8 | 8" (203.20) | 16" (406.40) | 18" (457.20) |
| CRW - 9 | 9" (228.60) | 13 1/2" (342.90) | 15 1/2" (393.70) |
| CRW - 9-9 | 9" (228.60) | 18" (457.20) | 20" (508.00) |
| CRW - 10 | 10" (254.00) | 15" (381.00) | 17" (431.80) |

EXPAND-O-FLASH

Expand-O-Flash joint covers are designed to manage seismic movements of roof joints. These systems are applicable to both new and existing roof conditions as well as related exterior walls.

Each cover is a combination of flexible Elastomeric membrane, supported by a closed cell foam, forming a flexible bellow with two metal flanges. Expand-O-Flash system covers are flexible, waterproof and provide ease of installation.

Metal Flanges are available in;

- 26 GA Galvanized Steel
- Mill Finish Aluminum (0.032")
- Stainless Steel (0.081")
- Copper (16 oz)

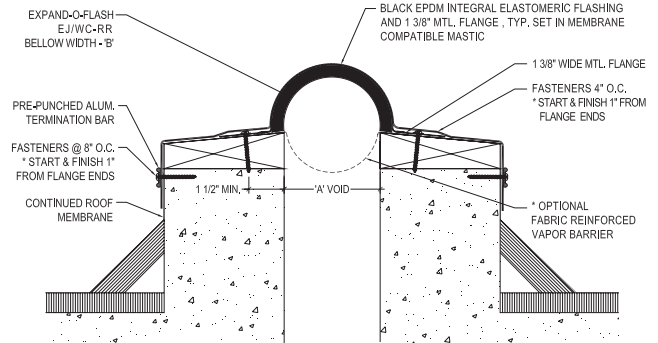
Flexible Rubber Membranes;

- White or Black 60 Mil EPDM
- Black 60 Mil Neoprene

* Standard Color - Black

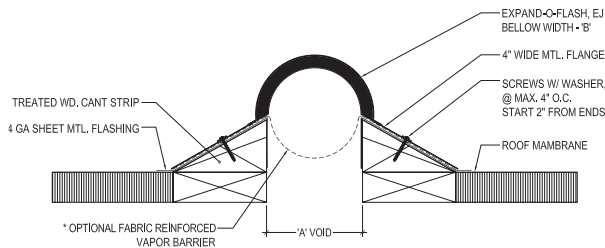
*Alternative materials available upon request.

MODEL EJ / WC ROOF WIDE CURB TO WIDE CURB



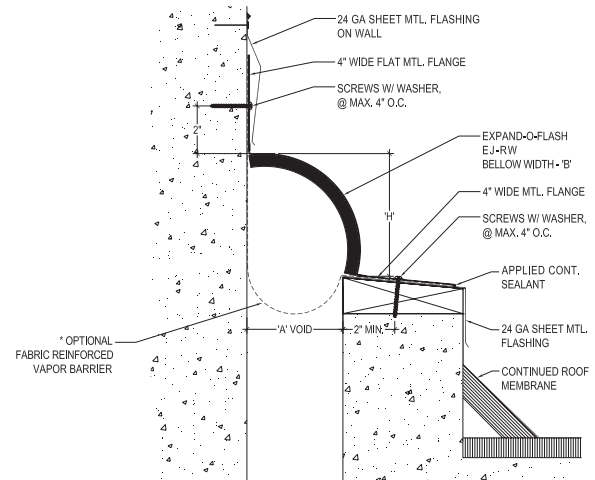
* Wide curb to Wall covers available

MODEL EJ ROOF CANT TO ROOF CANT

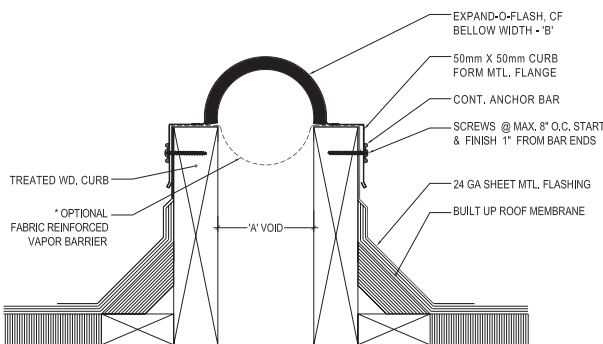


* Roof cant to Wall covers available

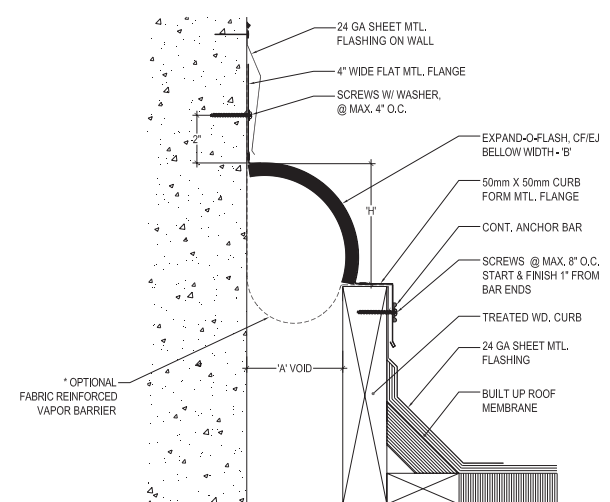
MODEL EJ ROOF PARAPET TO WALL



MODEL CF ROOF CURB TO ROOF CURB



MODEL CF-EJ ROOF CURB TO WALL



| OPENING | BELLOW WIDTH | FOAM THICKNESS | STYLE EJ | STYLE CF & CF-EJ |
|--------------------|---------------|-----------------|---------------------|-------------------------|
| 1 1/2\" TO 2 1/2\" | 4\" (101.60) | 3/8\" (0.375\") | EJ-4 (10ft / 50 ft) | CF-4, CF-EJ-4 (10 ft) |
| 2 1/2\" TO 3 1/2\" | 6\" (152.40) | 1/2\" (0.500\") | EJ-6 (10ft / 50 ft) | CF-6, CF-EJ-6 (10 ft) |
| 3 1/2\" TO 5\" | 8\" (203.00) | 1/2\" (0.500\") | EJ-8 (10ft / 50 ft) | CF-8, CF-EJ-8 (10 ft) |
| 5\" TO 6 1/2\" | 10\" (254.00) | 5/8\" (0.625\") | EJ-10 (10 ft) | CF-10, CF-EJ-10 (10 ft) |
| 6 1/2\" TO 8\" | 12\" (304.80) | 3/4\" (0.750\") | EJ-12 (10 ft) | CF-12, CF-EJ-12 (10 ft) |

Rule of Thumb to determine bellow width based on +/- 50% movement

Roof to Roof models : 1.5 x ('A' Joint width)

Roof to Wall models : 2.0 x ('A' Joint width)

Contact M.H. Powell & Co., Inc. for conditions with wider curbs.

Refer Johns Manville Roofing Systems Group for more information www.jm.com

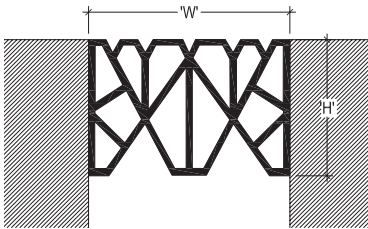
Mounting Height 'H' for roof to wall Expand-O-Flash joint covers

| BELLOW WIDTH | 4" | 6" | 8" | 10" | 12" | 14" | 16" | 18" | 20" | 24" |
|---------------------|--------|--------|----|--------|--------|--------|---------|---------|---------|---------|
| MOUNTING HEIGHT 'H' | 2 1/2" | 3 3/4" | 5" | 6 1/4" | 7 1/2" | 8 1/4" | 10 1/4" | 11 1/2" | 12 3/4" | 15 1/4" |

Compression seals are applicable for Floors, Walls (exterior and interior), and Ceilings. These seals are flexible, water-tight and easy to install.

Seal Material - Neoprene - Black
Santoprene - Standard colors

AF SERIES



Due to the top surface texture form, **AF** series is more suitable for pedestrian traffic in a variety of building types.

The "honeycomb" design creates the required outward pressure for an assured watertight seal.

Suitable for pedestrian and low stress vehicular traffic.

The cross sections shows the seal in its uncompressed state. Once in the compressed state, the top sections are much closer together and form a level pedestrian walking surface and a pleasing visual effect for exposed vertical applications.



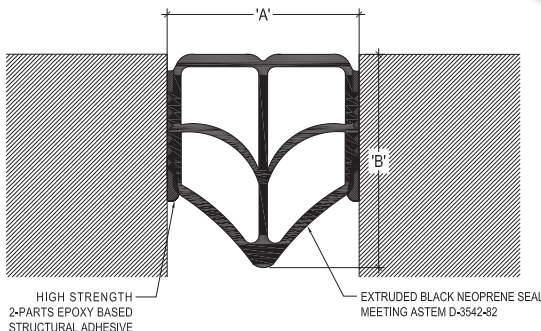
• Santoprene color seals are available for minimum of 100 ft length installations.

JP SERIES

Two Part Epoxy System

Other seal profiles are available to match specific project requirements.

JP Seals are designed to meet ADA guidelines providing smooth and no bump surfaces for pedestrians.



SEAL CHARACTERISTICS

JOINT DESIGN CRITERIA

| MODEL | NOMINAL WIDTH (W) | NOMINAL HEIGHT (H) | MAX. MOVEMENT | NOMINAL WIDTH (W) | NOMINAL HEIGHT (H) | MAX. MOVEMENT |
|--------|-------------------|--------------------|---------------|-------------------|--------------------|---------------|
| AF-200 | 2.00" (50.8) | 1.50" (38.1) | 0.80" (20.3) | 0.90" (22.9) | 1.70" (43.2) | 1.75" (44.5) |
| AF-225 | 2.25" (57.2) | 1.50" (38.1) | 0.90" (22.9) | 1.00" (25.4) | 1.90" (48.3) | 1.75" (44.5) |
| AF-250 | 2.50" (63.5) | 2.00" (50.8) | 1.10" (27.9) | 1.20" (30.5) | 2.13" (54.1) | 2.20" (55.9) |
| AF-300 | 3.00" (76.1) | 2.12" (53.9) | 1.45" (36.9) | 1.10" (27.9) | 2.55" (64.8) | 2.50" (63.5) |
| AF-400 | 4.00" (101.6) | 2.81" (71.4) | 1.80" (45.7) | 1.60" (40.6) | 3.40" (86.4) | 3.20" (81.3) |
| AF-500 | 5.00" (127.0) | 3.25" (82.6) | 2.30" (58.4) | 1.95" (49.5) | 4.25" (108.0) | 3.70" (94.0) |

Maximum movement that a seal can accommodate is an important consideration when selecting a specific compression seal model.

Contact MH Powell & Co., Inc. to select most appropriate seal size to match the specific expansion joint width.

Too narrow of an opening against selected seal type may cause excessive stress on seal and result in premature failure. Too wide of an opening may not provide sufficient compressive force to hold the seal in place.

15% Minimum compression

AF Series - Floors with low stress vehicular traffic and walls.



| PRODUCT | MIN. WIDTH | MAX. WIDTH | TOT. MOVEMENT | DIM. 'A' | DIM. 'B' |
|---------|--------------|---------------|---------------|---------------|---------------|
| JP-100 | 0.65" (16.5) | 1.35" (34.3) | 0.70" (17.8) | 1.00" (25.4) | 1.19" (30.2) |
| JP-150 | 0.98" (24.9) | 2.02" (51.3) | 1.05" (26.7) | 1.50" (38.1) | 1.88" (47.8) |
| JP-200 | 1.30" (33.0) | 2.70" (68.6) | 1.40" (35.6) | 2.00" (50.8) | 2.44" (62.0) |
| JP-250 | 1.63" (41.4) | 3.38" (85.9) | 1.75" (44.4) | 2.50" (63.5) | 2.94" (74.7) |
| JP-300 | 1.95" (49.5) | 4.02" (102.1) | 2.10" (53.3) | 3.00" (76.2) | 3.94" (100.1) |
| JP-350 | 2.25" (57.1) | 4.75" (120.6) | 2.50" (63.5) | 3.50" (88.9) | 4.12" (104.6) |
| JP-400 | 2.60" (66.0) | 5.40" (137.2) | 2.80" (71.1) | 4.00" (101.6) | 4.50" (114.3) |
| JP-500 | 3.25" (82.6) | 6.75" (171.5) | 3.50" (88.9) | 5.00" (127.0) | 6.00" (152.4) |

The combination of extruded elastomeric profile and high strength two part epoxy based adhesive has made **JP Series** a structurally strong, reliable and simple Compression & Tension seal system.

JP System seal is capable of sealing the expansion joint opening from the intrusion of water and other environment debris such as dust and organic matter.

The unique cell profile allows the JP Seal internal cell structure to move in either direction making it suitable for compression as well as tension forces.

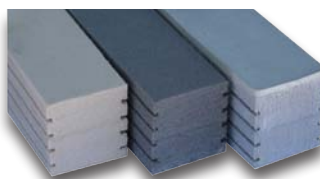
JP Seal system is more suitable where both horizontal and vertical movements are applied.

- Parking Garages
- Bridges
- Ramps
- Stair Cases

FLEXIBLE SEAL SYSTEMS

PLY-SEAL SYSTEMS

Ply-Seal Systems are suitable for conditions with heavy or continuous exposure to moisture. Higher tension and compression bearing and waterproofing capability of Ply-Seal systems have made it a reliable application for bridges, car parks, tunnels, water treatment plants and many commercial structures.



Ply-Seal systems are compatible with construction materials and resistant to abrasion, oxidation, oils, gasoline, salt etc.

- Works as a moisture barrier.
- Available for expansion joints of 3/4" to 4" wide (Standard)
Larger sizes are available to match specific field conditions.

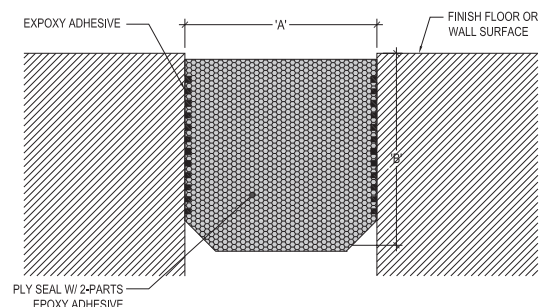
Key Models Available

- **Ply-Seal**
- **Ply-Seal XE Gray**
- **Ply-Seal XE Beige**
- **Ply-Krete**

Applicable at Walls, Ceilings and Floors

- UV Resistant - UV Inhibitor added
- ADA Compliant with Sealant Cap
- 60% Compression & 30% Tension & 100% Shear
- Quick and easy installation
- A Monolithic waterproofing system.

| MODEL NUMBER | JOINT GAP @60° F | REQ. SEAL SIZE (W X D) | MOVEMENT RANGE |
|--------------|------------------|------------------------|----------------|
| #1.00 | 0.75" (19.0) | 1.00" x 1.50" | 0.40" - 1.30" |
| #1.38 | 1.00" (25.0) | 1.38" x 2.00" | 0.50" - 1.80" |
| #1.63 | 1.25" (32.0) | 1.63" x 2.00" | 0.60" - 2.10" |
| #2.00 | 1.50" (38.0) | 2.00" x 2.00" | 0.80" - 2.60" |
| #2.38 | 1.75" (44.0) | 2.38" x 2.00" | 0.90" - 3.10" |
| #2.75 | 2.00" (51.0) | 2.75" x 2.00" | 1.10" - 3.60" |
| #3.00 | 2.25" (57.0) | 3.00" x 2.50" | 1.20" - 3.90" |
| #3.25 | 2.50" (64.0) | 3.25" x 2.50" | 1.30" - 4.20" |
| #3.50 | 2.75" (70.0) | 3.50" x 2.50" | 1.40" - 4.50" |
| #4.00 | 3.00" (76.0) | 4.00" x 3.00" | 1.60" - 5.20" |
| #4.50 | 3.50" (89.0) | 4.50" x 3.00" | 1.80" - 5.80" |
| #5.00 | 4.00" (102.0) | 5.00" x 3.50" | 2.00" - 6.50" |



Contact M.H. Powell & Co., Inc. for more product details.

FIRE BARRIERS

- UL Listed for 1 & 2 hour Fire Rating per UL2079 (current code)
- Quick, Cost Effective Installation - No caulk needed
- 50% Expansion, Contraction and Parallel Lateral Shear Movement is Standard
- Compatible with most Expansion Joint Assemblies
- Standard Open Widths Up to 30 inches
- Custom Systems Available
- Meets requirements of **UBC, BOCA, NFPA, ICBO and SBCCI**

FIRE BARRIER FOR EXPANSION JOINT SYSTEMS

Thermal Structures expansion joint fire barrier systems offer 1 and 2 hour full fire protection.

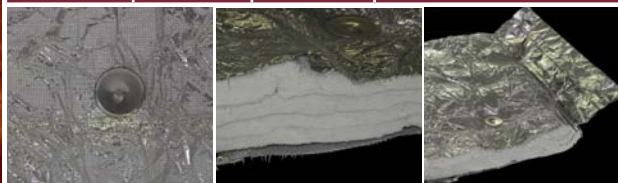
The standard FS 5800 systems can withstand 50% parallel shear or expansion and contraction.

FS 5800 is designed for easy, low cost installation. Custom systems with more dynamic movement or unique applications such as Base Isolation buildings are available.



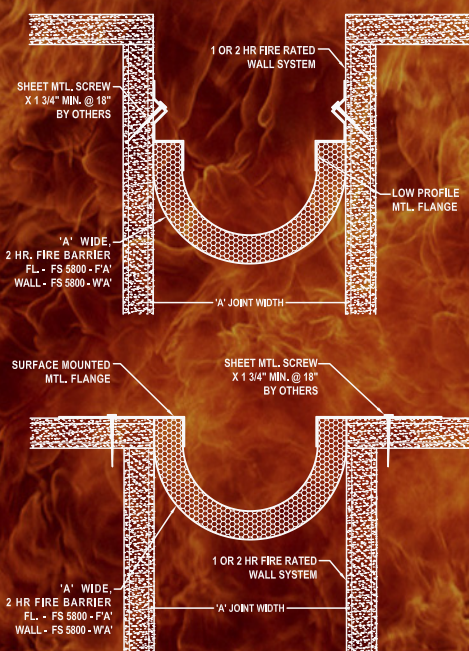
MODELS - FS-5800

| Floor to Floor Fire Barrier | Wall & Ceiling Fire Barrier | Floor to Wall Fire Barrier | Nominal Joint Width |
|-----------------------------|-----------------------------|----------------------------|---------------------|
| FS 5800-F 1 | FS 5800-W 1 | FS 5800-FW 1 | 1 inch |
| FS 5800-F 2 | FS 5800-W 2 | FS 5800-FW 2 | 2 inches |
| FS 5800-F 3 | FS 5800-W 3 | FS 5800-FW 3 | 3 inches |
| FS 5800-F 4 | FS 5800-W 4 | FS 5800-FW 4 | 4 inches |
| FS 5800-F 5 | FS 5800-W 5 | FS 5800-FW 5 | 5 inches |
| FS 5800-F 6 | FS 5800-W 6 | FS 5800-FW 6 | 6 inches |
| FS 5800-F 8 | FS 5800-W 8 | FS 5800-FW 8 | 8 inches |
| FS 5800-F10 | FS 5800-W10 | FS 5800-FW10 | 10 inches |
| FS 5800-F12 | FS 5800-W12 | FS 5800-FW12 | 12 inches |
| FS 5800-F14 | FS 5800-W14 | FS 5800-FW14 | 14 inches |
| FS 5800-F16 | FS 5800-W16 | FS 5800-FW16 | 16 inches |
| FS 5800-F18 | FS 5800-W18 | FS 5800-FW18 | 18 inches |
| FS 5800-F20 | FS 5800-W20 | FS 5800-FW20 | 20 inches |



Wire Mesh for additional Tensile strength

- Thermo Ceramic fiber in between aluminum foils to provide 2 Hr fire resistance



For rated expansion joints of 3" and more the Low profile metal flange is recommended.

The inner walls of the expansion joint should be 2Hr. fire rated.

Contact M.H. Powell & Co., Inc.

- More fire barrier models
- Installation instructions
- UL test reports

ISO 9001 Certified

Fire barriers are compatible with all Aluminum joint cover systems on floors, walls, roofs, ceilings and DSB Santoprene seals as well.

Note: Guide Specifications contains performance and descriptive requirements which apply to a variety of standard and custom products by M. H. Powell & Co., Inc. Edit sections to include only requirements applicable to project and to scheduled joint covers. Contact M. H. Powell & Co., Inc. for assistance.

Section 05810 Expansion Joint Covers

PART 1 – GENERAL

1.01 WORK INCLUDED

A. Joint covers for [seismic] [expansion] [wind sway] [and other building movement] joints.

1.02 RELATED WORK

Performed by others; Preparation of joint, installation and related adjacent finishes on roofs, floors, walls, ceilings and sheet metal flashings.

1.03 SYSTEM DESCRIPTION

- A. Joint covers shall permit restrained movement of joint without disengagement of cover. Describe special movement conditions.
- B. Fire rated joint covers shall have been tested per UL2029 and classified by Underwriters Laboratories. Fire rating shall be [1 hour] [2 hours] [not less than rating of adjacent construction]. Materials shall be inorganic and shall not create smoke or contribute fuel during a fire.
- C. Allowable load on floor joint cover plate shall be 200 PSI [or as specified for vehicular traffic and/or H20 loading].
- D. Spherical Model Centering Bars must be fully engaged with the base member.

1.04 SUBMITTALS

- A. Submit shop drawings and product data indicating joint cover profile details, dimensions, location within the work, affected adjacent construction, anchorage, finishes, splices, and accessories.
- B. Submit manufacturer's installation instructions.
- C. Fire Rated Joint Covers: Submit numbers of UL Classification.

1.05 DELIVERY STORAGE, AND HANDLING

- A. Provide temporary protective cover on [anodized aluminum] [stainless steel] [bronze] finished surfaces.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURES

- A. Specifications and Drawings are based on M. H. Powell, Inc., 2313 Yates Ave., Commerce, CA 90040, phone (323) 887-0037
- B. Substitutions: Submit proposed substitutes in writing to architect no less than 30 days before bids are due. Submit samples and product data to demonstrate acceptability of proposed substitute. Acceptance will be by addendum.

2.02 MATERIALS

- A. Aluminum: 6105-T6, 6063-T5 or 6061-T6 extrusions; 6061-T6 plate; 5052-H32 sheet
- B. Stainless Steel: Model 304.
- C. Bronze: Alloy 385 extrusions; 280 sheet and plate.
- D. Water Barrier: Flexible TPE, or Neoprene, [30 mils] [60 mils] thick.
- E. Fire Barrier: Provide model required for indicated fire resistance and fabricated of layers of ceramic fiber insulation, metallic insulation, or silica fiber fabric with 3000°F approximate melting temperature.
- F. Fireproofing: Model required by fire rating; asbestos not acceptable.
- G. Provide fasteners, accessories, and other materials required for complete installation to manufacturer's instructions.

2.03 FABRICATION

- A. Flexible floor to floor joint covers
 - 1. Joint covers shall consist of cover plate fastened through center of spring steel centering bars. Bars shall be attached to spheres which are retained in tracks in extruded base members. Set centering bars diagonally at 20 inches on center maximum [or 12 inches on center for heavy duty models].
 - 2. Cover Plates: [Aluminum] [Bronze] [Stainless steel] with [smooth] [fluted] [grooved] [abrasive] [1/8 inch recessed] surface.
- B. Roof Joint Covers: Provide sealing washers and gaskets, splice covers, counterflashing flanges, and end closures.
- C. Fire Rated Joint Covers: [TSI 5800]
- D. Fabricate special transitions, corner fittings, and end closures. Miter and weld joints.
- E. Shop assemble components and package with anchors and fittings.
Provide components in single lengths where possible, minimizing site splicing.

2.04 FINISHES

A. Aluminum:

- A-1. Floor joint plates : Mill finish (6061-T6), Optional brushed finish
- A-2. Roof joint covers : Mill finish (5052)
- A-3. Wall / Ceiling joint covers : Mill Finish, Clear anodize finish, Optional painted

B. Bronze / Brass:

Floor joint plates, Walls & Ceiling joint covers : Brushed finish

C. Stainless Steel:

- C-1. Floor joint plates : Mill finish, Brushed finish
- C-2. Wall / Ceiling joint covers : 2B finish, Brushed finish (Base on plate thickness)

D. Elastomeric Seals :

Silicone : Standard colors, Optional full range of custom colors
Santoprene : Standard colors

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements [and block out dimensions] are as shown on shop drawings.

3.02 INSTALLATION

- A. Install joint covers to manufacturer's instructions. Align work plumb, level, and flush with adjacent surfaces. Rigidly anchor to substrate.
Make allowances for change in joint size due to difference between installation and building operating temperatures.
- B. Fire Rated Joint Covers: Install to requirements of fire rated design. Install fire barriers as required.
- C. Water Barrier: Provide water barriers at exterior joints and where called for on Drawings. Provide drainage fittings where called for on Drawings.

3.03 ADJUSTING AND PROTECTION

- A. Adjust joint cover to freely accommodate joint movement.
- B. Protect installation from damage by work of other trades. Where required, remove and store cover plate and install temporary protection over joints; reinstall cover plate before completion of work.

3.04 SCHEDULE

Indicate M. H. Powell Co., Inc. product number on drawings or schedule.

- A. Interior Floor Joints: _____
- B. Interior Wall Joints: _____
- C. Ceiling Joints: _____
- D. Fire Rated Joints: _____
- E. Exterior Floor Joints: _____
- F. Exterior Wall and Soffit Joints: _____
- G. Roof Joints: _____

WARRANTY

M. H. Powell & Co., Inc. warrants to its purchasers that all materials furnished will be free from defects in materials and/or workmanship. This warranty shall extend for a period of one (1) year following the date of shipment by us.

All defective materials will be refurbished after inspection by our company showing the materials have failed under this warranty and providing a written claim is presented to us within the warranty period. Under this warranty, we agree to refurbish the defective materials at no charge, excluding re-installing costs. This is in lieu of all other warranties expressed or implied and is the sole warranty extended by us. Our liability under this warranty is limited to the refurbishing of materials and does not include any responsibility for consequential or other damages of any nature.

NOTICES

M. H. Powell & Co. Inc. fire rated materials shown in this catalog are covered under one or more U.S. and foreign patents and patents pending. ASTM E119/ E814 test standards do not imply performance characteristics in actual fire. UL classifications are subject to re-examination, revision and possible cancellation. M. H. Powell & Co., Inc. reserves the right to make design changes we deem advisable to improve our products.

Contact M. H. Powell & Co., Inc. for current information.



M.H. POWELL & CO., INC.
www.mhpowell.net

ENVIRONMENTAL COMMITMENT

M.H. Powell & Co., Inc. receives a majority of extruded Aluminum from local manufacturers with factories in Riverside and Fontana, California.

Raw materials used for the production of Aluminum extrusions has the following average percentages of recycled waste;

| | |
|----------------------------------|-------|
| Post-consumer waste content of | 10.8% |
| Post-industrial waste content of | 41.7% |
| Total recycled waste content | 52.5% |

M.H. Powell & Co., Inc. receives Aluminum plate material manufactured by various North American facilities and/or from distributors in California, Iowa, Texas and Pennsylvania that recycle almost all of their generated waste. They also purchase or use in-house recycled waste for 50-90% of their pre-cast batch which they mix with pure aluminum and commercial metals to yield the ingots that facilitate their end products. The percentage may vary depending on the alloy that is selected.

Products are recyclable after use.

LEED CERTIFICATION INFORMATION

Our products may contribute towards achieving LEED Points in the following LEED certification categories.

Materials and Resources

MR Credit 5 - Local/Regional Materials
MR Credit 4 - Recycled Content

Indoor Environmental Quality

EQ Credit 4.1 - Low-emitting Adhesives
and Sealants



Aluminum Expansion Joint Covers and Assemblies
- M. H. Powell & Co., Inc.

Fire Protection Systems
- Thermal Structures, Inc.

Flexible Roof Systems
- Johns Manville

Elastomeric Products
- M. H. Powell & Co., Inc.

2313 YATES AVENUE
COMMERCE, CA 90040

PHONE : (323) 887-0037
FAX : (323) 887-0877

www.mhpowell.net

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Designed By : Kennath Walpita & Ayanthi Fernando