



**BRUECKE  
&  
GEBÄUDE**  
ENGINEERS PVT. LTD.

# Architectural Expansion Joints System

Architectural / Seismic / Fire rated



# Company Profile



## ABOUT BnG

BnG was established to provide modern specialize solution and cost-effective construction technologies, which are developed and updated by BnG expert ,R&D and technical team .

Our aim is always to offer not only the best solutions but also innovative construction techniques/products, designed to increase site safety, save time, improve durability, and reduce costs.

We are always keen to work in partnership with our clients right from conceptual stage and have our design and method engineers working closely with their estimating teams during tender stage.

Our main strength is the quality of our highly experienced, multi cultural staff. Our Marketing Staff is dedicated to listen and understand our client's needs and to prepare customized solutions for their projects.

The Company uses the latest design software, Technology which is continually updated to reflect current National and international construction codes of practice.

***Our ultimate goal is to deliver the best quality service to our clients, with top quality construction techniques, backed by our experience and well- trained specialists in design, methods and job site construction within time frame..***

## BnG Capabilities .

**Architectural Building Joints.**

**Post Tension in Buildings**

**Ground Anchors.**

**Post–Tension & Pre-Tension for Bridges.**

**Repairs & Strengthening .**



*“An **EXPANSION JOINT** or movement joint an assembly designed to safely absorb the heat– induced expansion*

*and contraction of construction materials, to absorb vibration, to hold parts together, or to allow movement due to ground settlement or earthquakes.”*

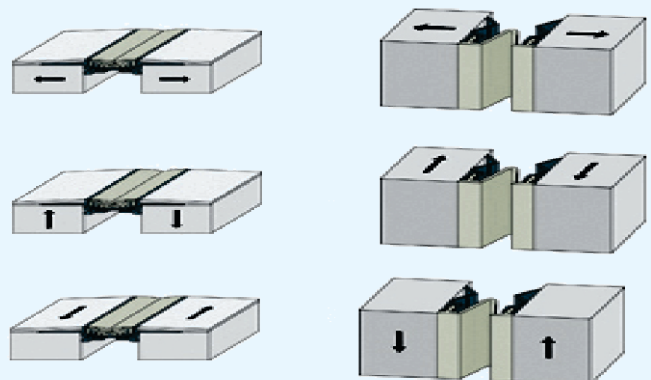
Building faces, concrete slabs, expand and contract due to warming and cooling from seasonal variation, or due to other heat sources. Before expansion joint gaps were built into these structures, they would crack under the stress induced .

## Why expansion joints are provided in buildings?

In building, an joint a mid-structure separation designed to relieve stress on caused by movement induced by: - thermal expansion contraction caused by temperature changes, - sway caused by wind, - seismic events, etc.

## What is an expansion gap?

When installing laminate or hardwood flooring you should leave a space between your floor and the baseboard or wall. This space is called **expansion gap** and allows the laminate or wood floor to expand or contract





# INTERIOR FLOOR JOINTS.

*Floor to Floor & Floor to Corner*



## BFS SYSTEM

Heavy-duty system both surface mounted cover plate as well recessed cover plate for wide joints. The self – centering device with interlocking frame allow the system to return its original alignment after seismic effect.

(Cover plates available in Aluminum and Stainless steel option.)

| Model   | Joint Opening (mm) | Movement (mm) |
|---------|--------------------|---------------|
| BFS-50  | 50                 | ± 25          |
| BFS-100 | 100                | ± 50          |
| BFS-150 | 150                | ± 75          |
| BFS-200 | 200                | ± 100         |
| BFS-250 | 250                | ± 125         |

## BFA SYSTEM

Flush Aluminum cover joint systems for Internal and External floor system with Snap locking Extrusion with center plate. Top plate is designed with serration for anti skid. No expose any fasteners.

| Model   | Joint Opening (mm) | Movement (mm) |
|---------|--------------------|---------------|
| BFA-50  | 50                 | ± 35          |
| BFA-100 | 100                | ± 60          |
| BFA-150 | 150                | ± 85          |
| BFA-200 | 200                | ± 120         |

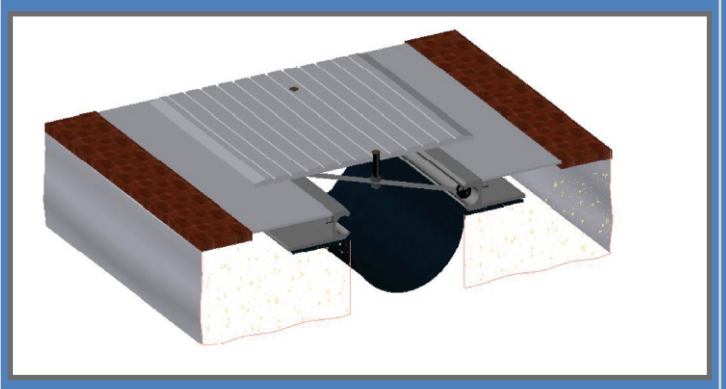
## BFP SYSTEM

Heavy duty pan system is a nearly invisible and capable of accommodating multi-directional seismic, vertical displacement and parallel lateral shear movement.

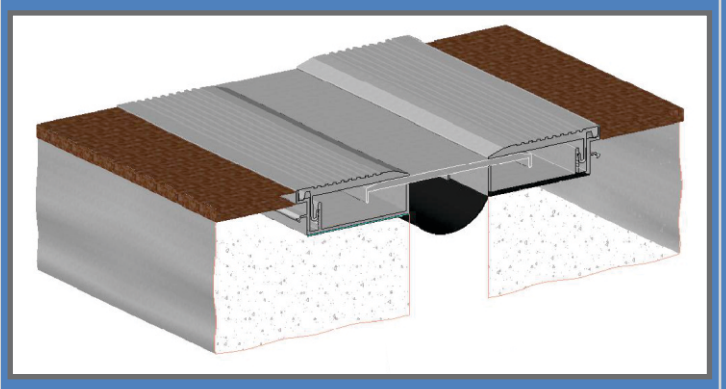
Accommodates most flooring materials and stays flush during thermal movement while rising upward during a seismic event.

| Model   | Joint Opening (mm) | Movement (mm) |
|---------|--------------------|---------------|
| BFP-100 | 100                | ± 50          |
| BFP-150 | 150                | ± 75          |
| BFP-200 | 200                | ± 100         |
| BFP-250 | 250                | ± 125         |
| BFP-300 | 300                | ± 150         |

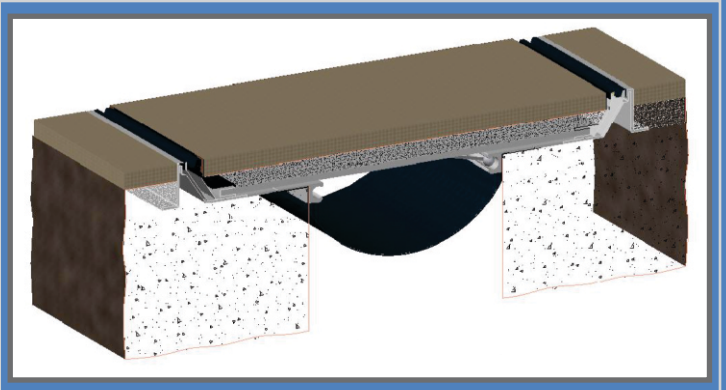
## BFS Model



## BFA Model



## BFP Model



# EXTERIOR FLOOR JOINTS.

*Floor to Floor & Floor to Corner*



## BRS SYSTEM

Aluminum cover systems engineered for thermal and seismic movement on flat and sloped roofs. For foot traffic. Aluminum system cover to resist snow and wind load. Integral weather-stop gasket and fabric reinforced rubber gutter keep outside elements from penetrating the structural opening and interior areas.

| Model   | Joint Opening (mm) | Movement (mm) |
|---------|--------------------|---------------|
| BRS-50  | 50                 | ± 25          |
| BRS-100 | 100                | ± 50          |
| BRS-150 | 150                | ± 75          |
| BRS-200 | 200                | ± 100         |
| BRS-250 | 250                | ± 125         |

## BRR SYSTEM

Flexible EPDM rubber bellow systems accommodate thermal and multi-directional seismic movement, provides a weather tight seal and follows complex directional transitions in a wide variety of roofing applications. Flexible rubber be allows are resistant, rain and extreme temperatures.

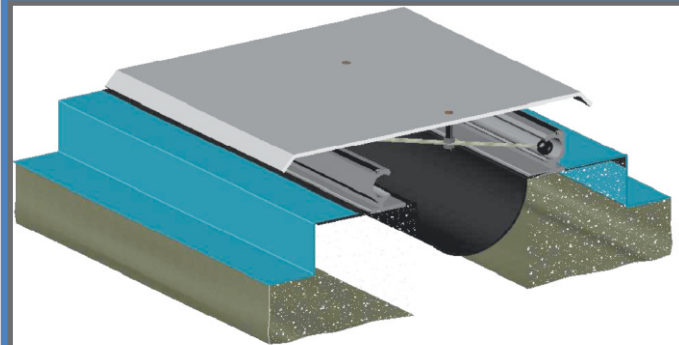
| Model   | Joint Opening (mm) | Movement (mm) |
|---------|--------------------|---------------|
| BRR-50  | 50                 | ± 40          |
| BRR-100 | 100                | ± 80          |

## BRC SYSTEM

Neoprene Rubber seal epoxy bonded to structural concrete joint opening creating a waterproof system.

| Model  | Joint Opening (mm) | Movement (mm) |
|--------|--------------------|---------------|
| BRC-25 | 25                 | ± 20          |
| BRC-50 | 50                 | ± 40          |

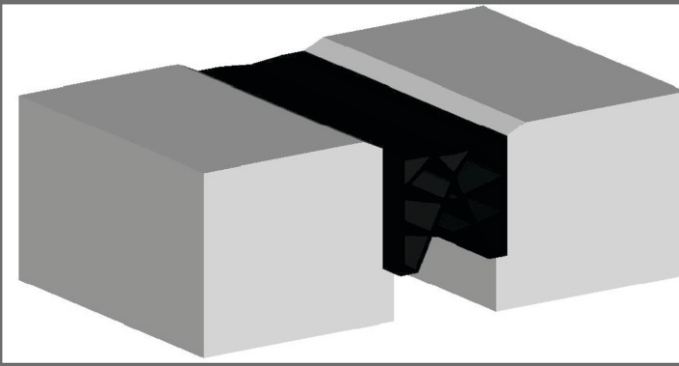
## BRS Model



## BRR Model



## BRC Model





# INTERIOR WALL/COLUMN ,CELING & EXTERIOR WALL JOINTS. *Wall to Wall & Wall to Corner*



## BWC SYSTEM

Aluminum cover systems engineered for thermal and seismic movement on flat and sloped roofs. For foot traffic. Aluminum system cover to resist snow and wind load. Integral weather-stop gasket and fabric reinforced rubber gutter keep outside elements from penetrating the structural opening and interior areas.

| Model  | Joint Opening (mm) | Movement (mm) |
|--------|--------------------|---------------|
| BWC-50 | 50                 | ± 25          |
| BWC-75 | 75                 | ± 35          |

## BWA SYSTEM

Self-locking aluminum cover system accommodate multidirectional movement for wide opening wall . Aluminum systems not requiring blackouts. Cover plate to be fixed with gasket at both end of top plate.

(Top Plate shall be supplied in various shades of powder coating to match wall and ceiling finish).

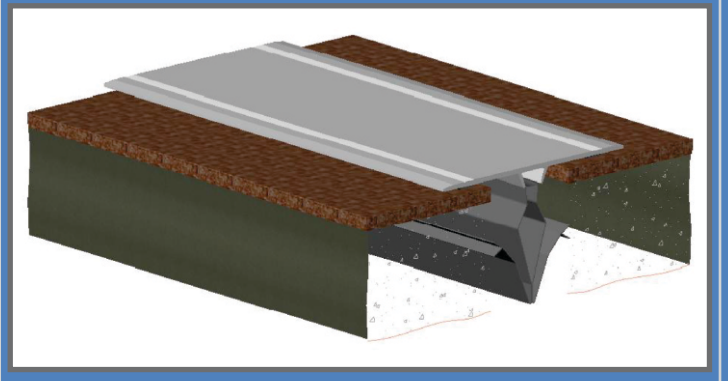
| Model   | Joint Opening (mm) | Movement (mm) |
|---------|--------------------|---------------|
| BWA-50  | 50                 | ± 37          |
| BWA-100 | 100                | ± 50          |
| BWA-150 | 150                | ± 80          |
| BWA-200 | 200                | ± 100         |

## BWP SYSTEM

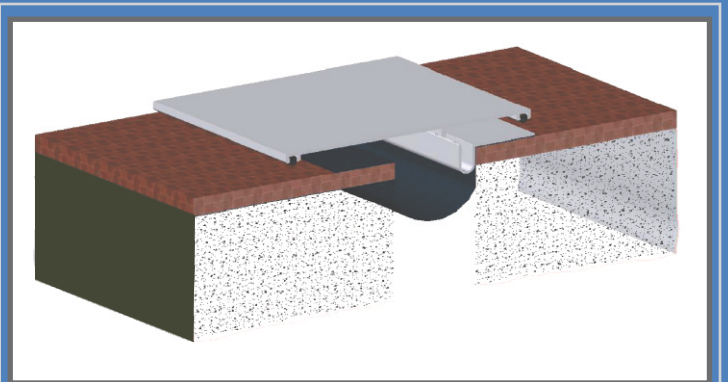
Flush Aluminum cover joint systems for Internal / External and ceiling system with Snap locking Extrusion with center plate. Top plate is designed to accommodate multi direction movements. No expose any fasteners.

| Model   | Joint Opening (mm) | Movement (mm) |
|---------|--------------------|---------------|
| BWP-50  | 50                 | ± 20          |
| BWP-75  | 75                 | ± 30          |
| BWP-100 | 100                | ± 50          |

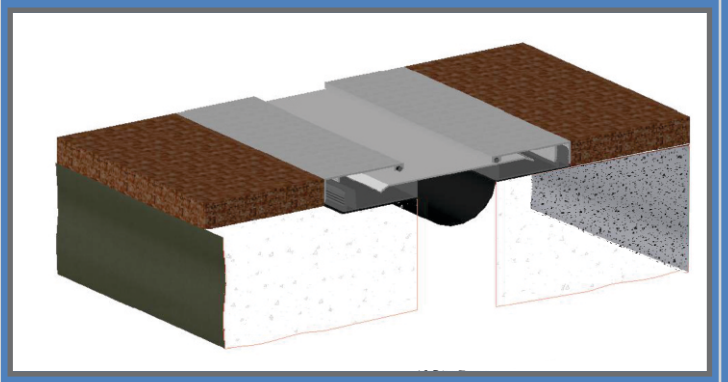
## BWC Model



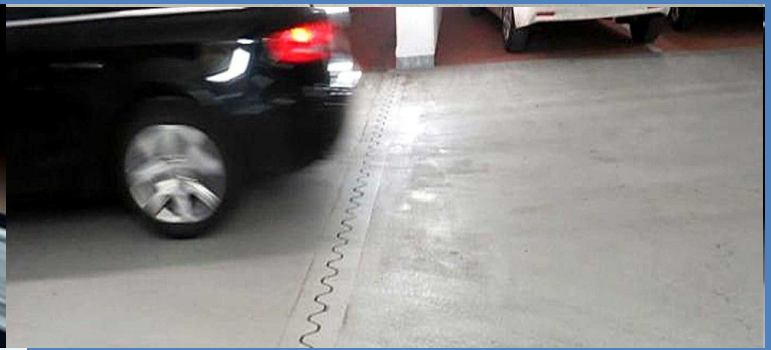
## BWA Model



## BWP Model



# PARKING JOINTS.



Floor to Floor & Floor to Corner

## BPA SYSTEM

Rubber nosing pads that accommodates vertical offsets in concrete decks. For covering expansion joint openings with recessed joint systems or fillers. Ideal for high traffic pedestrian areas. Safety Cover with rubber impact/nosing pads that flex independently.

*"Steel, Aluminum or MS cover plate can be customized according to site conditions".*

| Model   | Joint Opening (mm) | Movement (mm) |
|---------|--------------------|---------------|
| BPA-50  | 50                 | ± 25          |
| BPA-100 | 100                | ± 50          |
| BPA-150 | 150                | ± 75          |
| BPA-200 | 200                | ± 100         |
| BPA-250 | 250                | ± 125         |

## BPC SYSTEM

Waterproof rubber membrane seal with impact absorbing elastomeric concrete header. High performance monolithic waterproof expansion joint sealing system.

Capable of thermal, seismic, vertical and lateral shear movement. Membrane seal with perforated wings bonded to deck with impact absorbing elastomeric concrete. GP-2 Crete is a hard, elastic, abrasion resistant embed material that flexes with deck loads.

| Model  | Joint Opening (mm) | Movement (mm) |
|--------|--------------------|---------------|
| BPC-50 | 50                 | ± 30          |
| BPC-80 | 80                 | ± 60          |

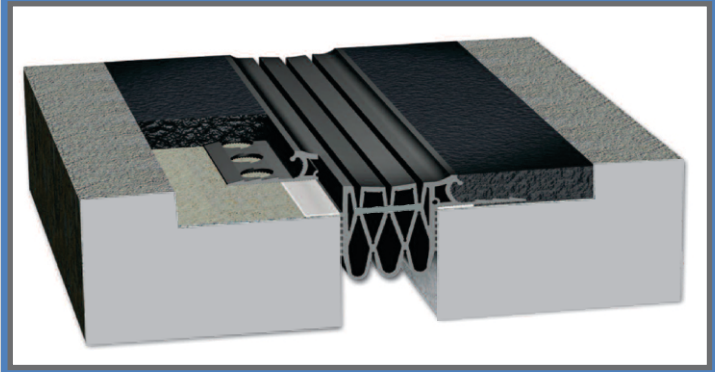
## FIRE BARRIER SYSTEM

Building expansion joint slab and wall openings inherently create a pathway for fire and smoke to travel through. Our industry leading Expansion Joint Fire Barrier products provide protection for 2, 3, and 4-hour rated conditions. We've designed our systems to fit any project's needs and provide superior protection to keep the threat contained.

## BPA Model



## BPC Model



## Fire Barrier Model





# OUR SERVICES



**Bonded PT Slab**



**Architectural Expansion Joints**



**Un Bonded PT Slab**



**PT Bridges**



**Ground Anchors**



**Rehabilitation of Structures**



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**Post-Tensioning, Pre-Tensioning, Architectural Joints, Ground Anchors, Repairs and Strengthening**

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