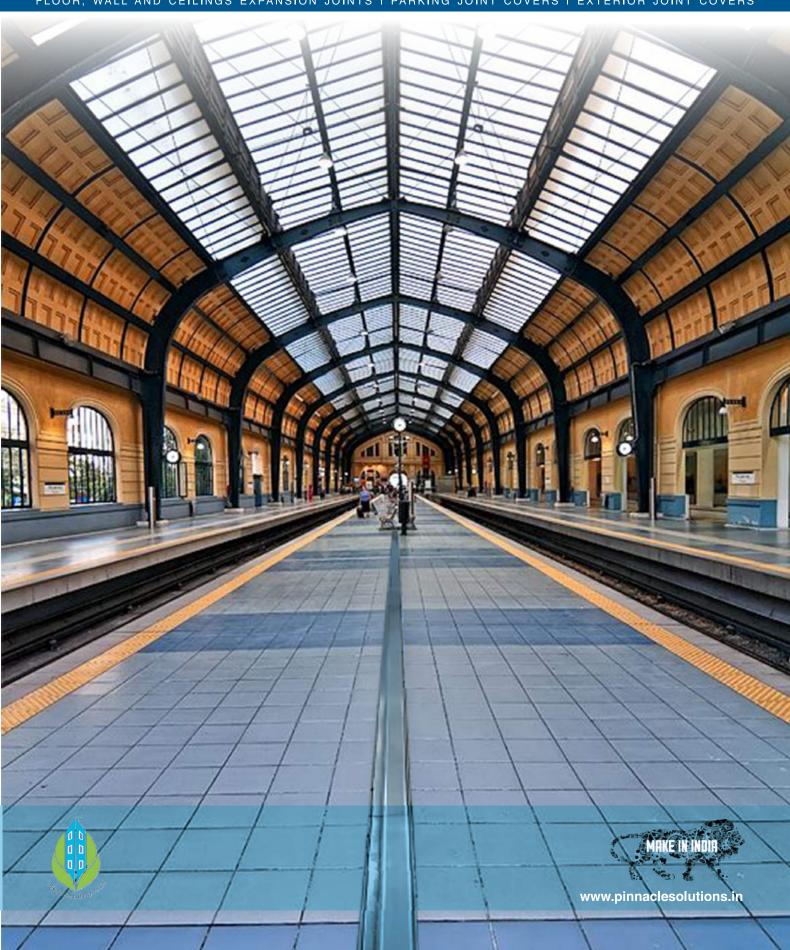


FLOOR, WALL AND CEILINGS EXPANSION JOINTS | PARKING JOINT COVERS | EXTERIOR JOINT COVERS







Expansion Joint Systems

With a wide experience in designing and manufacturing and providing solutions over expansion joint covers, Pinnacle offers the most comprehensive range in the world. We also offer support at every stage, from the selection process right through to a practical consideration at the installation. We also provide guidance to help you with selecting the expansion joint cover that best suits your project needs, taking into account expected movements, joint widths, the usage environment and the aesthetics of the finish. Should you have any questions at all, we encourage you to contact us for further clarification and technical assistance.

About Us

Pinnacle Solutions operates through 3 offices from Mumbai and has key manufacturing location at Mumbai with PAN India presence of our representatives to extend support to you.

Our product ranges include: Thermal and seismic expansion joint cover systems for floors, walls and ceilings, exterior facades and car parks, Pinnacle also has a Brand of Glass Partition system "Sonic". We have offered our solutions and are successfully installed across a spectrum of business sectors across the country.

At Pinnacle, we provide wide possibilities of applications for areas like Education, Retail, Airports & Train Stations, Commercial, Healthcare, Shopping Centers, Car Parks, Sports & Leisure, Housing and Hotels.

Content

Basics of Expansion Joints and Guidelines	 04
Floor Joint Cover Systems	 06
Wall Joint Cover Systems	 11
Parking Joint Cover Systems	 16
Roof Joint Cover Systems	 20
Joint Cover Accessories	 22

Basics of Expansion Joints and Guidelines

Characteristics

- Structural gaps designed to accommodate the movement of a building in a controlled manner, preventing damage to the internal an external finishes.
- 2. Expansion joints go right through the structure of the building from top to bottom and front to back.
- 3. They often become wider as you go higher up in the building.

Type of Movements

Thermal / Shrinkage - movement caused by the structure expanding and contracting with temperature changes, or shrinking as it dries out.

Settlement - movement caused by the dead and live loads of the structure on the supporting foundation.

Wind Sway - movement caused by the effect of strong winds on the structure, which is more pronounced on tall buildings.

Seismic - multi-directional movement caused by seismic events, can be significant depending on the magnitude of the seismic activity. EJCs provide a covered transition across an expansion or movement joint opening and remain unaffected by the relative movement of the two surfaces either side of the joint.

Expansion or movement joint width

The nominal joint width is the width of the structural expansion gap under normal operating temperatures. Expansion joint covers are designed to work with specific joint widths, or a range of joint widths.

Anticipated movement

This can either be expressed as an overall movement, as a percentage of the expansion joint width or, more usually, as a \pm movement. For example, a 50mm nominal expansion joint with an anticipated expansion and contraction of 25mm could be expressed as:

- a. 50mm ± 25 mm
- b. 50mm with a total movement of 50mm
- c. 50mm ± 50%

Building usage and loading requirements

The type of usage that the building will be put to will affect the choice of expansion joint cover.

For example, if the expansion joint is in a hospital, or other type of building where hygiene and infection control are of paramount importance, then a smooth gasketed model may be the optimum choice as it will be flush fitting, wheel friendly, watertight and can be sealed further to enhance infection control.

In a heavily trafficked area where infection control is not an issue, such as light industrial, leisure or retail, the optimum choice may be an all metal model that is hard-wearing, easily assembled and tamper-proof.

For very heavily trafficked areas, which will be subjected to heavy wheeled traffic, such as an airport, sports stadium, shopping center or heavy industrial, the optimum choice would be a heavy duty all metal model that has all the advantages of the standard duty model with the added ability to withstand a 1000kg point load.

Generally, the floor EJC application is the element most affected by usage, it is therefore recommended that the selection process begins with the floor cover and progresses from there.

Aesthetics

When selecting EJCs consider adjacent floor and wall finishes. Certain models allow for the finish to be integrated into the cover assembly, thus minimising the visual impact. It is also possible to colour match the gaskets subject to minimum order quantities

Additional considerations

Blockout Recess - It is essential to specify and correctly frrm the blockout for any recess mounted floor EJCs. Minimum recess dimensions required to be discussed with our representative.

Moisture Barrier - If moisture ingress is an issue, optional Moisture Barriers with or without drainage can be provided.

Acoustic Barrier - Acoustic Barriers can be provided in areas where noise transfer is an issue.

Transition between adjacent cover systems - It is important that transition details are worked out thoroughly, since bad transitions can ruin even the best joint cover scheme.

Transitions in exterior covers, particularly between roof and wall covers, are critical to the water tightness of the exterior envelope.

Material handling and acclimatisation

- Prior to the commencement of installation, all materials should be inspected for damage.
- 2. Acclimatize product in the installation environment for 24 hours.
- Review Installation Instructions to familiarize yourself with all the details and components of the expansion joint cover assembly.
- 4. All of our expansion joint cover systems are including the fixings, where required aluminum profiles are factory pre-drilled.
- 5. Sub-floor preparation (Recess mounted models)
- 6. The blockouts must be prepared to receive recess mounted floor joint covers. It is recommended that the recess is formed a minimum of 5mm deeper to allow for leveling prior to the installation of the joint cover components.
- Non-shrink, self-levelling bedding compound should be used on top of concrete floor slabs in order to provide a level, even and structurally sound base under the entire width and length of the expansion joint cover base frame.

General guidelines

Full Installation Instructions are supplied with all our products, can be downloaded from our website or requested via phone. The following are general guidelines.

- 1. Fire Barrier systems, if required, should be installed before the installation of the Expansion Joint Cover.
- Moisture Barrier, if required (and not part of the expansion joint cover), should be installed before proceeding with the installation of the EJC.
- 3. If there is an expected temperature change of over 11° Celsius daily, leave a 1.5mm gap at the end of each 3 meter length section due to the thermal expansion of aluminium. Where possible, stagger the center plate and side frame joins. Seal in between plates to close the gap.
- 4. Fixings for any Expansion Joint Cover system will inevitably tend to be close to the edge of the concrete floor slab. It is therefore important that any fixings used should not exert an excessive sideways force, which might fracture the concrete along the side of the floor slab and cause it to spall.
- We recommend that fixings used for installation of floor EJCs should achieve at least 40mm embedment into the concrete slab.





A brand with a team of experts offering customized solutions to suit your needs.



PFT Series | 25-50mm joints | 30-60mm recess mounted | aluminum with co-extruded gasket

VERSATILE AND HYGIENIC

A versatile cover for small to mid-sized expansion joints. Conceived to be placed into planned floor recesses, embedded in floor screed or used with stone, terrazzo, etc. Its co-extruded thermoplastic gasket offers water resistance to wet floor cleaning operations.

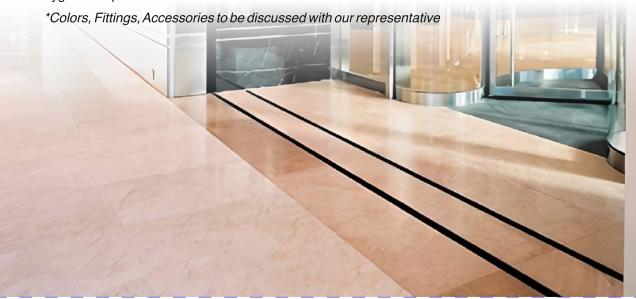
—— Thermoplastic Gasket

Aluminium Center Plate

Extruded Aluminium Side Frames

APPLICATION AREAS

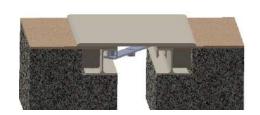
New Constructions, Environments with hygienic requirements

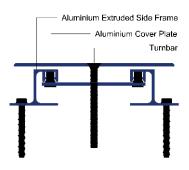


PJP Series | 25-400mm joints | 38mm recess mounted | full aluminum joint covers

CLEAR-CUT COVER FOR LARGE JOINTS

A sleek, seismic, all metal cover for large expansion joints. The cover's locking mechanism disengages during seismic activity allowing for movements in all directions while remaining flush during thermal movements.





APPLICATION AREAS

Large office or commercial buildings.

PPF Series | 25-100mm joints | 25-50mm recess mounted | full aluminum joint covers

DESIGNED FOR TRANSIT AREAS

This recess cover has been specifically designed to resist heavy rolling traffic. This comes in range of different frame heights to suit most floor finishes.

APPLICATION AREAS

Ideal for transit areas with heavy rolling traffic such as airport terminal, bus and railway stations and other traffic hubs.





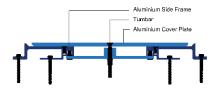


PJ HD Series | 100-200mm joints | 36mm recess mounted | full aluminum joint covers

HEAVY DUTY FOR ROLLING LOADS

This seismic cover has been engineered for heavy rolling loads, withstanding point loads of up to 1000 kg. During thermal movements the cover remains centred and flush but disengages during seismic activity allowing for free movement in all directions.





APPLICATION AREAS

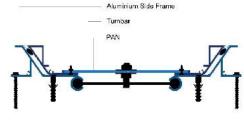
Industrial application with heavy rolling equipment, terminals and transport hubs.



PSR Series | 50-250mm joints | 57mm recess mounted | full aluminum joint covers

LARGE JOINTS, VIRTUALLY **INVISIBLE**

Virtually invisible seismic floor covers for interior and exterior applications, designed to accept a variety of floor finishes and handle multi-directional movements. Its exclusive edge protection eliminates chipping of pavers while the thickness of the modular pan prevents flooring deflection and cracking.



APPLICATION AREAS

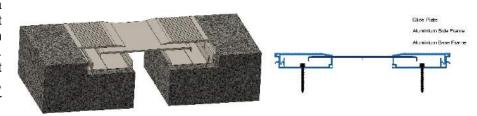
Large public and commercial buildings with demanding floor designs.



PLS Series | 50-100mm joints | 25mm recess mounted | full aluminum joint covers

FREE FLOATING COVER

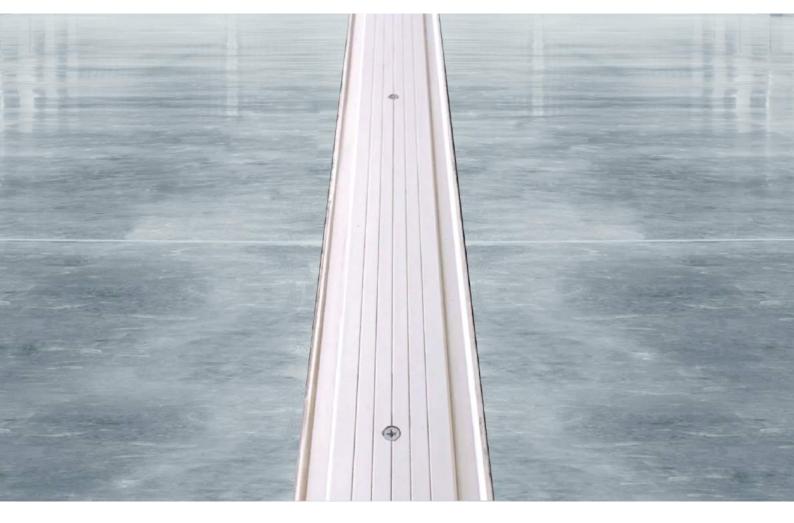
This recessed, all metal cover features a free floating aluminum centre plate that spans the junction and moves between components to provide mobility as needed. The cover perfectly fits the application that require little upkeep and are tamper-proof, available in several metal finishes. Bigger sizes available on request.



APPLICATION AREAS

Interior or Exterior applications *Colors, Fitti<mark>ngs, Accessories to be discussed with our representative</mark>





A **brand** with an **eye to detail.**



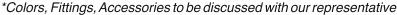
PSM Series | 25-150mm joints | surface mounted | full aluminum joint covers

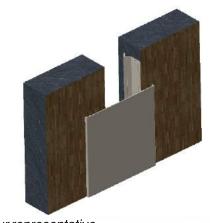
A PERFECT MATCH FOR YOUR WALLS

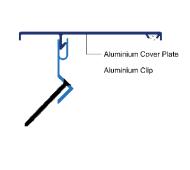
This sleek and stylish aluminum wall cover is supplied in clear anodized color and can be powder coated in any RAL shade to match the surrounding walls. With no exposed fasteners, this cover remains tamper-proof and low maintenance activity.

APPLICATION AREAS

Interiors with specific wall design and color requirement.









P-SFW Series | 100-400mm joints | surface mounted | full aluminum joint covers

HIDING LARGE SEISMIC JOINTS

This self-centering cover hides large seismic joints with style. The aluminum cover plate is supplied in clear anodized color and can be powder coated to any RAL shade. It also admits the application of decorative wall paper or can be painted to match the surrounding wall design.





APPLICATION AREAS

Interiors of large commercial structures with wall design requirements.



PFW Series | 25-200mm joints | 16mm recess mounted | full aluminum joint covers

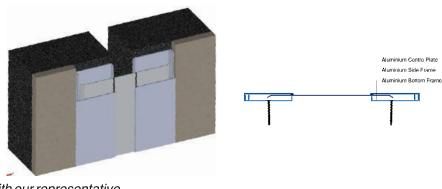
FLUSH WITH NO VISIBLE FIXINGS

Especially designed for flush finishes with ceramic tiles, stone or plaster board. The exterior covers clip onto the bottom side frames and provide a flush and tamper-proof finish without any visible fixings.

APPLICATION AREAS

Interior with ceramic tiles, stone, plaster-boards or wood panels.

*Colors, Fittings, Accessories to be discussed with our representative





PDN Series | 25-50mm joints | surface mounted | EPDM rubber compression seals

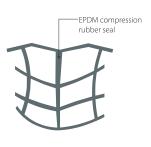
VERSATILE AND STRAIGHT FORWARD

This joint cover is suitable for most wall and ceiling finishes. It provides a clean finish and is easy to apply at the same time allowing movements in all directions.

APPLICATION AREAS

Refurbishment of old expansion joints, small wall and ceiling joints.



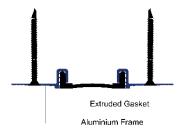




PFWF Series | 25-50mm joints | 1mm recess mounted | aluminum with co-extruded gasket

FLUSH AND NEAT

A surface mounted wall and ceiling cover with a little recess to offer a neat and flush result with plaster or mortar finishes. The co-extruded central gasket is field replacaable, and is available in three colors to blend into the wall design.



APPLICATION AREAS

Wall with plaster or mortar finish, Acrovyn wall protection panels.

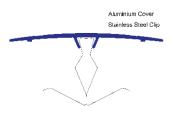
*Colors, Fittings, Accessories to be discussed with our representative

P-90 | 25-50mm joints | surface mounted | full aluminum joint covers

THE QUICK INSTALL, ALL-ROUND COVER

This light weight and versatile aluminum profile is ideal to cover small to mid sized expansion joints literally in a snap by the virtue of its stainless steel clips the covers are installed in jiffy regardless of the wall finish.





APPLICATION AREAS

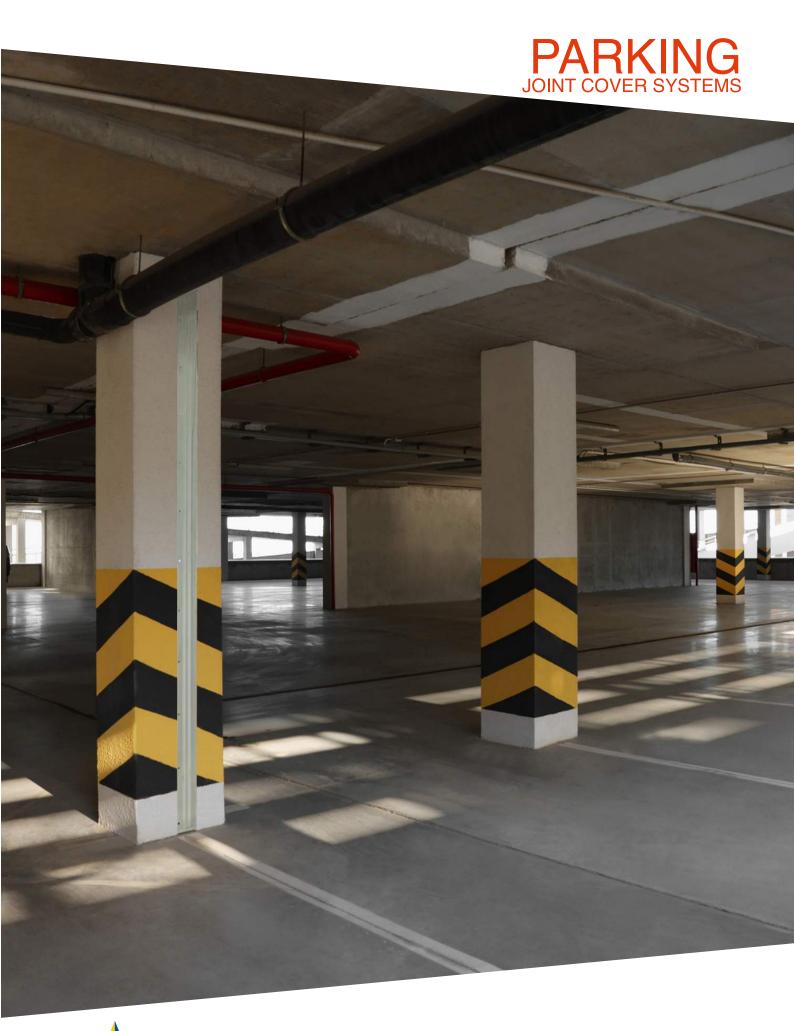
Moderately frequented interiors, ideal for retrofit situations.







A **brand** providing all expansion joint **solutions** under **one-roof**.



PZB Series | 50-100mm joints | 19mm recess mounted | EPDM elastomer block

VERSATILE AND STRAIGHTFORWARD

PZB is a waterproof, one piece extruded EPDM elastomeric seal with integral nosings, which is bonded to the substrate with high strength epoxy adhesive. PZB is much stronger than traditional elastomeric concrete systems providing a truly trouble free long-term joint solution.

Elastic Center

EPDM Elastomer

APPLICATION AREAS

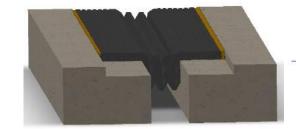
Retro-fit applications, parking, stadiums. requirement.



PPDS Series I 50mm joints I 30-90mm recess mounted I aluminum with gasket

WATER-PROOF JOINT SYSTEM

Resistant to traffic, snow and rain, this is the joint cover of choice for exterior car parks. Its weldable EPDM central gasket completely water-proofs the cover while its sturdy aluminum side frames and stainless steel capping makes it extremely hard wearing.





APPLICATION AREAS

Open air car parks or structures exposed to rain and snow.



PHB Series | 25-100mm joints | flush surface mounted | EPDM elastomer

WATERTIGHT PARKING JOINTS

This one piece extruded EPDM seal creates a watertight system when used with high strength epoxy adhesive. Its serrated edges create epoxy reservoirs and improve adhesion to joint walls. The closed cell design allows the system to achieve ±50% movement capability.





APPLICATION AREAS

Parking, warehouses, storage facilities

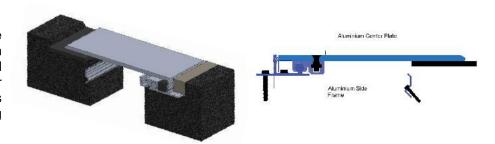
*Colors, Fittings, Accessories to be discussed with our representative



PPTC Series | 150-250mm joints | 38mm recess | metal seismic cover with damper system

HEAVY DUTY, SEISMIC PERFORMANCE

A heavy duty, seismic cover for large expansion joints of up to 25 cm or even more upon request. A clever engineered damper system allows the central cover plate to move freely during seismic events while preventing flapping and clanging noise on passing vehicles.



APPLICATION AREAS

Large seismic joints of car parks.





A **brand** redefining the architectural **aesthetics**.





PRI Series | 25-400mm joints | surface mounted | roof cover with moisture barrier

100% WEATHER AND WATER PROOF

Aluminum roof covers for applications where occasional access is expected and durability is an issue. Systems include rubber seals and a moisture barrier for guaranteed water tightness.



APPLICATION AREAS

Flat or sloped roof top applications.

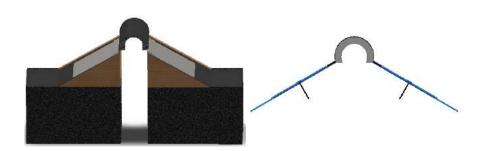
*Colors, Fittings, Accessories to be discussed with our representative



P-BRJ Series | 50-200mm joints | surface mounted | EPDM elastomer

FLEXIBLE ROOF COVER

This elastic membrane-based flexible roof cover allows for movement in several directions. There is a supplementary waterstop accessible. To guarantee solutions that are impermeable, factory-fabricated transitions are available. Bigger sizes or special applications are available on request.



APPLICATION AREAS

Usage on built-up, flat or sloping roofs.



MOISTURE BARRIER | joints of any size | EPDM OR SBR membranes

FOR MOISTURE TIGHT RESULTS

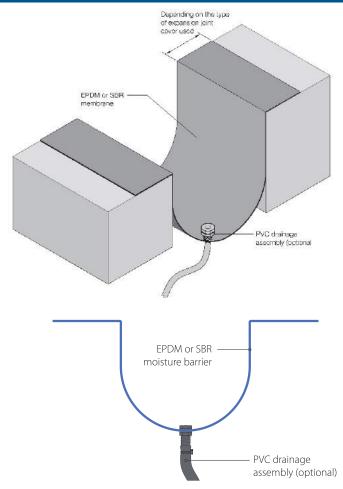
An ideal complement to our floor joints where absolute water tightness is required

Moisture barrier is flexible EPDM or SBR membrane, available with an optional drainage assembly. The membrane is installed beneath the expansion joint cover to help prevent moisture ingress from above or below.

APPLICATION AREAS

Any type of floor or wall joint.

*Details to be discussed with our representative



ACOUSTIC BARRIER I joints of any size I EPDM or SBR membranes

ACOUSTIC INSULATION FOR ANY JOINT

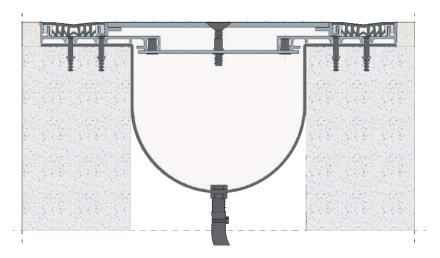
A perfect solution to stop airborne noise penetrating in the a building segment

Acoustic Barrier is a flexible, non reinforced mass loaded vinyl that resists the passage of sound waves and reduces the transmission of airborne noise. It is supplied on a roll and available in four density options offering different noise reduction rates.

APPLICATION AREAS

Any type of floor or wall joint.

*Details to be discussed with our representative















A **brand** that **understands** your **needs** and **stands** with you **forever**.

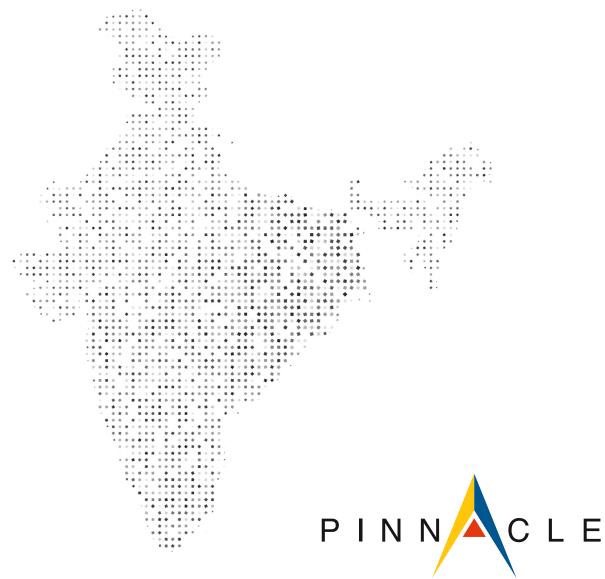




All our prices are inclusive of:

- · Accurate quotes when you need them
- · Complete shop drawings
- A Project manager to control the process from your enquiry till handover
- · Code-complaint hardware required to mount covers properly to the building
- · Specialized equipments to help with installation
- · Staggered shipments to ensure timely delivery of material

OFFERING SOLUTIONS PAN INDIA



EXPANSION JOINTS COVER SYSTEMS

Please write to us for more details -

For Enquiries - enquiry@pinnaclesolutions.in

For Service and support - technical@pinnaclesolutions.in

Reg. office:

Office No. 201/A, Arihant Royale, Shastri Nagar, Bal Rajeshwar Road, Mulund (W) Mumbai, Pin - 400080 Maharashtra, India

Factory:

Plot No. 475/3, Biloshi MIDC, Kudus, Khanivali Road, Dist. Wada, Biloshi, Wada, Maharashtra, India

Phone

+91 81081 68086

www.pinnaclesolutions.in

Expansion Joints Cover Systems Catalogue / 06/2023