

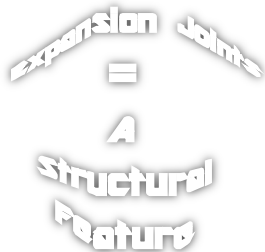


# VISTAGRAM – EXPANSION JOINTS

By Victoria Group

## Victoria Infratech Projects Pvt. Ltd.

Expansion Joints in today's world are very integral part of the structure, where they allow free movements to the structure, simultaneously they need to be treated well and cover well as per the aesthetics of the Architecture. So, Victoria has developed the systems for the need of the day and has come up with the solutions as required in the structure and buildings.



**Victoria** is having a successful track record in the business of concept selling, System development, Execution by professionally trained applicators, Specifications development and a lot many together have gained an experience and strength and are confident of rendering specialised services to our valued clients.

Expansion Joints systems are being proposed and designed by us are setting the benchmark in the market. Victoria has all the range of Expansion joints and Seismic joints systems.

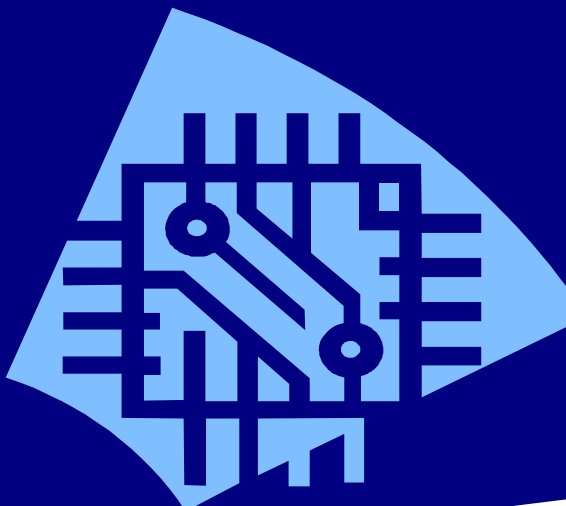
We have complete right approach range of the expansion joint covers and we even customised the systems as per your projects requirements with proper design and crafts. Quality is the essence for Victoria; we deliver the best for the projects with the competitive prices.

Expansion joint is an important part of the building and hence, it should be taken into consideration with equal importance, hence, at required projects, we can even provide the fire proof systems also.

## **Vistaaram** EXPANSION JOINTS SYSTEMS - MOVEMENTS

**Vistaaram** is fully equipped for taking up the turnkey projects in their portfolio and enhances the list of our major clients. Victoria is always striving for the latest technology and introducing the best to its clients, there are further more profiles and systems are awaited to be introduced in near future.

The company has an excellent experience in the line of Waterproofing, Thermal Insulation, Foam Concrete, Guniting, Grouting, Repairs and Rehabilitation and Expansion Joints.



**Vistaaram** - EXPANSION JOINTS by Victor Group

Victoria Infratech Projects Pvt. Ltd.



**Victoria Infratech Projects Pvt. Ltd**

Talkatora Club, Park Street, New Delhi – 110001

# 011 2300 3578, 2300 3453 Email - [projects@victoriagroup.co.in](mailto:projects@victoriagroup.co.in), [wevictorians@yahoo.com](mailto:wevictorians@yahoo.com)

PDF Created with deskPDF PDF Creator X - Trial :: <http://www.docudesk.com>  
Website: - [www.victoriagroup.co.in](http://www.victoriagroup.co.in)

# Expansion Joints

## Expansion Joint? - A Structural - Feature!! = Vistaaram

An opening within a structure at pre-determined location to take of expansion and contraction, wind or seismic movement of a structure. If a building does not have an Expansion joint it would not survive the Heat of Summer and Cold of Winters. Joints are good. Joints should be treated well though.

### Expansion Joint Cover?

Expansion joint cover safely covers the pre-determined gap while allowing the required movement. It may be a simple cover plate or engineered system.

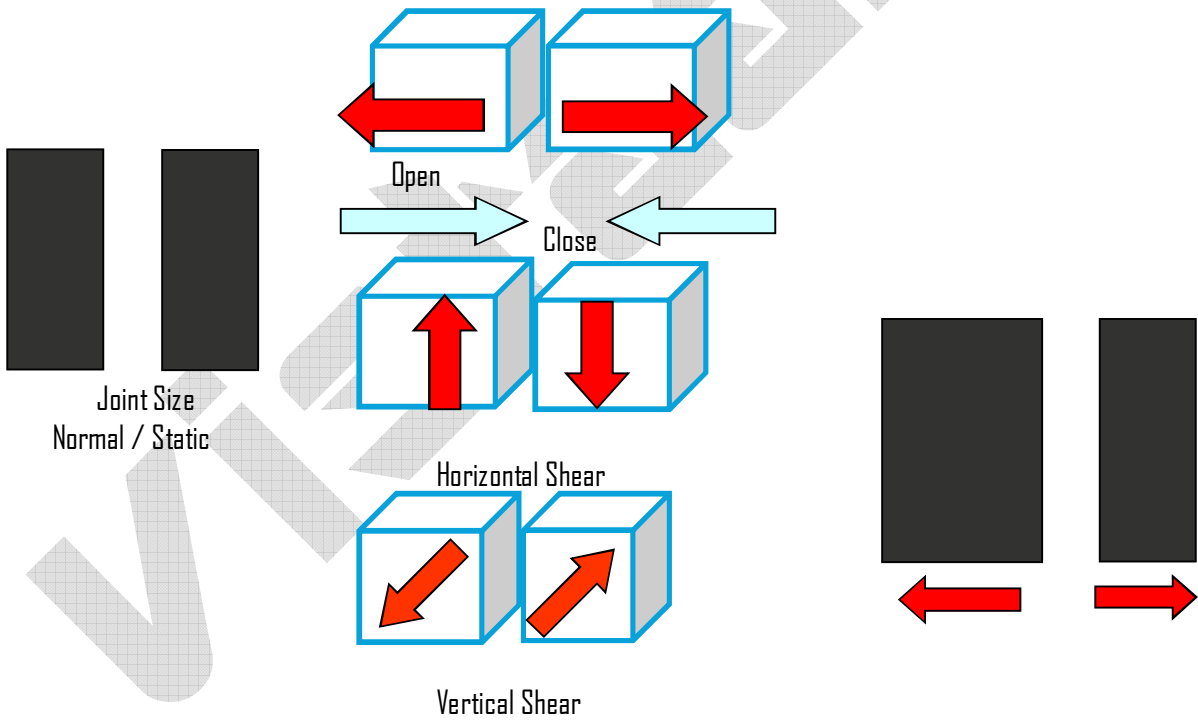
### Considerations while choosing Expansion joint cover?

It is very important to know the expected movement (Thermal or seismic), water exposure, load requirements and aesthetic requirements.

### Types of movements: Thermal and Seismic

**Thermal:** Joints up to 4" (100mm) are thermal joints. Movement caused by temperature changes within the structure is thermal movement. Thermal movement is horizontal.

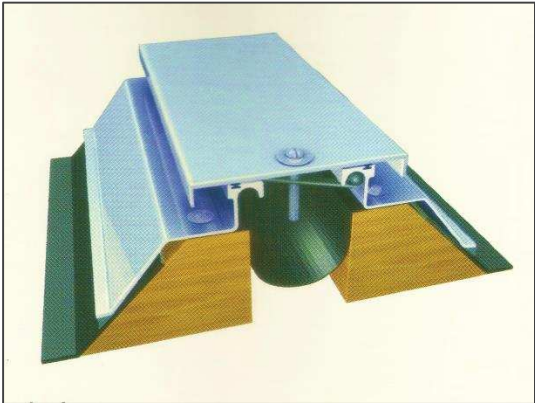
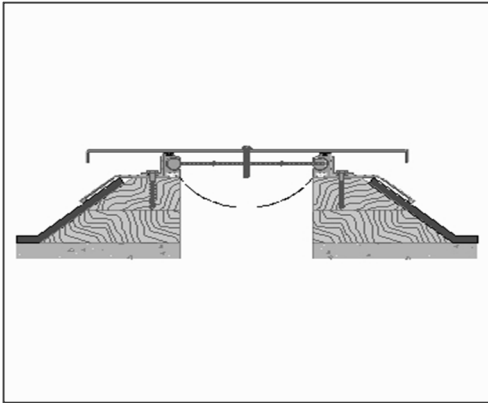
**Seismic:** Joints above 4" (100mm) are seismic joints. Movement caused by earthquake activity beneath the structure is seismic movement. Seismic movement may be horizontal, vertical or shear or a combination of all three.



### Considerations for Choosing Expansion Joints' System

<ul style="list-style-type: none"><li>Expected Movement<ul style="list-style-type: none"><li>Seismic zones</li><li>Soil or substrate conditions</li><li>Type and size of structure</li><li>Wind loads</li><li>Frequency of movement</li><li>Type of movement</li></ul></li></ul>	<ul style="list-style-type: none"><li>Construction<ul style="list-style-type: none"><li>Materials</li><li>Fire rated</li></ul></li></ul>	<ul style="list-style-type: none"><li>Water Exposer</li></ul>
<ul style="list-style-type: none"><li>Load requirements<ul style="list-style-type: none"><li>Pedestrian</li><li>Traffic</li><li>Forklifts or carts</li><li>Vehicular</li></ul></li></ul>	<ul style="list-style-type: none"><li>Design<ul style="list-style-type: none"><li>Sight line</li><li>Materials</li></ul></li></ul>	<ul style="list-style-type: none"><li>Things to Avoid<ul style="list-style-type: none"><li>Radius joints</li><li>Change of direction</li></ul></li></ul>

Vistaaram - Roof Covers



MODEL - VM RLP

Roof to Roof

Movement Capabilities –  
100% and 50%

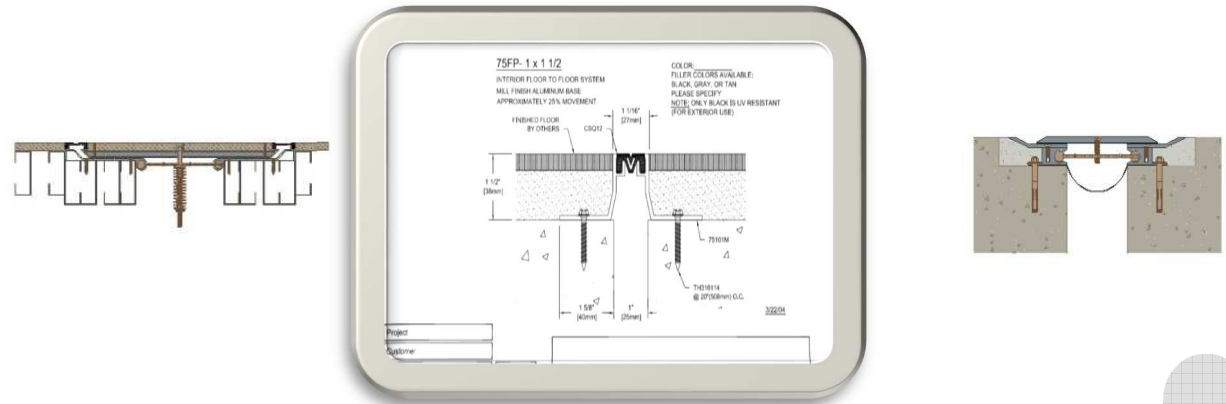
<ul style="list-style-type: none"><li>Aluminum Extrusion-6063 T5</li><li>Heavy duty, Water tight</li><li>Extrude cover plate with assembly</li><li>Easy to install</li><li>Movement ± 50% to 100%, Suitable for 3" - 8" Joint width</li><li>Application Area - Roof joint</li><li>Cover plate available in Mill finish, Clear anodised</li></ul> <p>Sizes Available: 75mm - 200mm Joints' Sizes</p>	<p>Aluminum Wall/Roof Series</p> <ol style="list-style-type: none"><li>Aluminum Cover Plate, Standard Mill Finish (Self Centering for Wall to Wall and Roof to Roof Applications)</li><li>Extruded Aluminum Channel (6063-T5) - Standard Mill Finish</li><li>Centering Bar</li><li>EPDM Water Barrier</li><li>Wall Construction/Roof Construction - by Others</li><li>Flashing By Others</li></ol>
Vistaaram's Roof Bellows are standard Black EPDM	



Installation Guidelines (Model VRT) :

Make block out in masonry and Fix EPDM membrane on both edges of joint with high strength epoxy to create water barrier. Install base frame on the edges and fasten with mechanical fasteners on both ends. Fix cover plate on top with the help of steel spring clips or turn bar from top to keep center plate free floating.

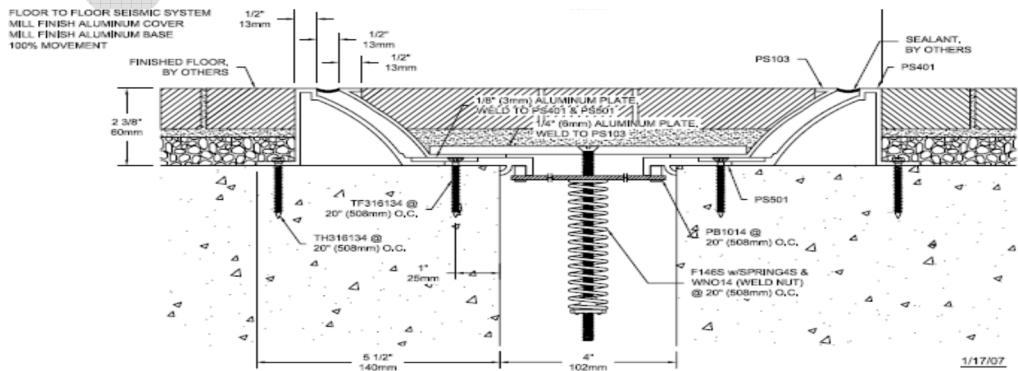
Vistaaram - Floor to Floor Systems



MODEL - HEAVY DUTY FLOOR COVERS - VM FP / WD / PAN SERIES

Movement Capabilities - 100%  
Normal Movement Capabilities - 50%

<ul style="list-style-type: none"><li>Aluminum Extrusion-6063 T5</li><li>Concealed frame, suitable for Interior / Exterior</li><li>Extrude cover plate with assembly</li><li>Base mount frame</li><li>Movement ± 50% to 100%, Suitable for 2" - 8" Joint width</li><li>Suitable for light vehicular traffic</li><li>Cover plate available in Mill finish / Clear anodised.</li></ul>	<p>Aluminum Floor Series</p> <ol style="list-style-type: none"><li>Aluminum Cover Plate, Standard Mill Finish (Self Centering for Wall to Wall and Roof to Roof Applications)</li><li>Extruded Aluminum Channel (6063-T5) - Standard Mill Finish</li><li>Centering Sheet Clips</li><li>EPDM Water Barrier</li><li>Floor Construction - by Others</li><li>Flashing By Others</li></ol>
<p>Sizes Available: 50mm - 150mm Joints' Sizes</p>	
<p>VistaaraM's Roof Bellows are standard Black EPDM</p>	



Installation Guidelines (Model VWD) :

The blackout must be prepared to receive the base frame. Depth to be adjusted as per frame height. The frame will be anchored to the slab with mechanical fasteners. Fix cover plate with the help of steel spring clips or turn bar from top to keep center plate free floating.Fill the blackout with cementitious grout.Water barrier optional.

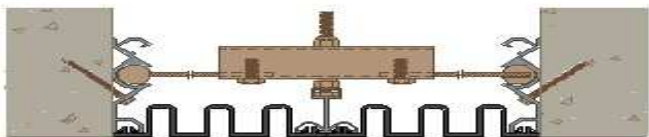
Vistaaram - Seismic Wall to Wall System



MODEL – WALL TO WALL COVERS – VM 9W / VM FCWW

Movement Capabilities - 100%  
Normal Movement Capabilities – 50%

<ul style="list-style-type: none"><li>Aluminum Extrusion-6063 T5</li><li>Concealed frame, suitable for Interior / Exterior</li><li>Extrude cover plate with assembly</li><li>Base mount frame</li><li>Movement ± 50% to 100%, Suitable for 2" - 8" Joint width</li><li>Suitable for light vehicular traffic</li><li>Cover plate available in Mill finish / Clear anodised.</li></ul> <p>Sizes Available: 50mm – 150mm Joints' Sizes</p> <p>Vistaaram's Roof Bellows are standard Black EPDM</p>	<p>Aluminum Wall Series</p> <ol style="list-style-type: none"><li>Aluminum Cover Plate, Standard Mill Finish (Self Centering for Wall to Wall and Roof to Roof Applications)</li><li>Extruded Aluminum Channel (6063-T5) – Standard Mill Finish</li><li>Centering Sheet Clips</li><li>EPDM Water Barrier</li><li>Floor Construction – by Others</li><li>Flashing By Others</li></ol>
---	--



Installation Guidelines(Model VWT):

Fix EPDM membrane on both edges of joint with high strength epoxy to create water barrier.Install base frame on he edges of wall and fasten with mechanical fastners on both ends Fix cover plate on top with the help of steel spring clips or turn bar from top to keep center plate free floating.

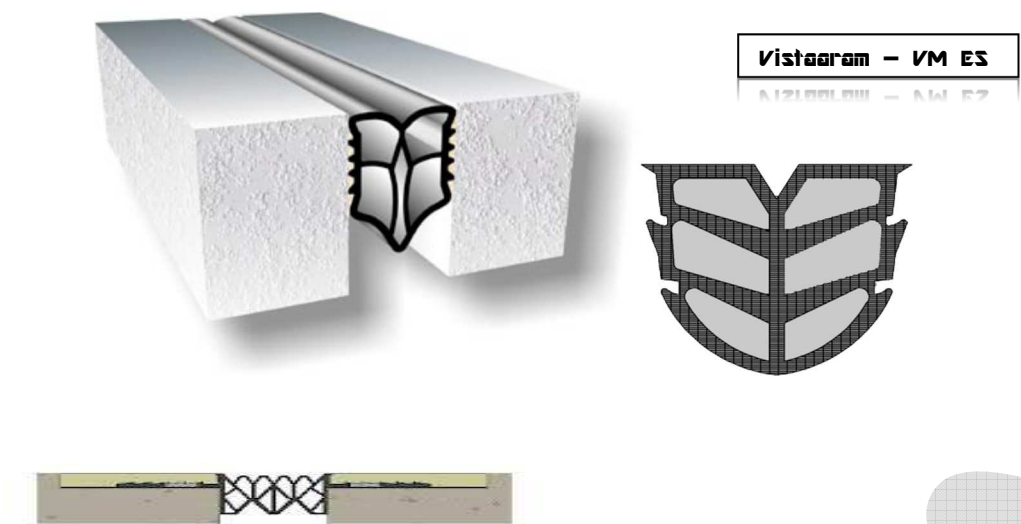
Victoria Infratech Projects Pvt. Ltd.

Talkatora Club, Park Street, New Delhi – 110001

# 011 2300 3578, 2300 3453 Email – [projects@victoriagroup.co.in](mailto:projects@victoriagroup.co.in), [wevictorians@yahoo.com](mailto:wevictorians@yahoo.com)  
Website: - [www.victoriagroup.co.in](http://www.victoriagroup.co.in)



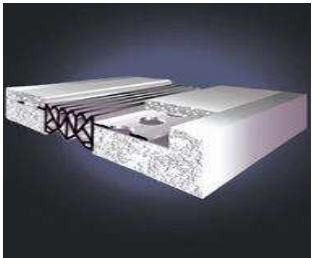
Vistaaram - Elastic Seal System



MODEL - PARKING/RAMPS - VM ES

THIS SYSTEM INCLUDES A COMPRESSION SEAL PROFILE WITH HIGH STRENGTH EPOXY. THIS PROFILE SUITS ANY EXPANSION JOINTS IN THE BUILDING INTERNAL/EXTERNAL AND HORIZONTAL/VERTICAL. WHEN INSERTED IN THE STRUCTURE SEALS THE OPENING FROM INTRUSION OF WATER AND DEBRIS.

<ul style="list-style-type: none"><li>• EPDM Extrusion (Compression Seal)</li><li>• Multi chambered</li><li>• Colour - Black</li><li>• Shore hardness 74A,</li><li>• Easy to Install, Snap fit Seal with Epoxy adhesive</li><li>• UV Resistant, No Cracks</li><li>• Suitable for 1"- 4" Joint width</li></ul>
Sizes Available: 25mm - 100mm Joints' Sizes
Vistaaram's Roof Bellows are standard Black EPDM



Driveway - VM WINGS

Installation Guidelines :

Make block out in the floor, it should be flat, levelled and completely dry. Broken edges must be repaired with Non shrink grout. Apply high strength 2k epoxy adhesive on both sides of block out and push seal into joint opening and set wings on wet epoxy bedding. Seal the edges with Polyurethane adhesive to make the joint watertight.

Victoria Infratech Projects Pvt. Ltd.

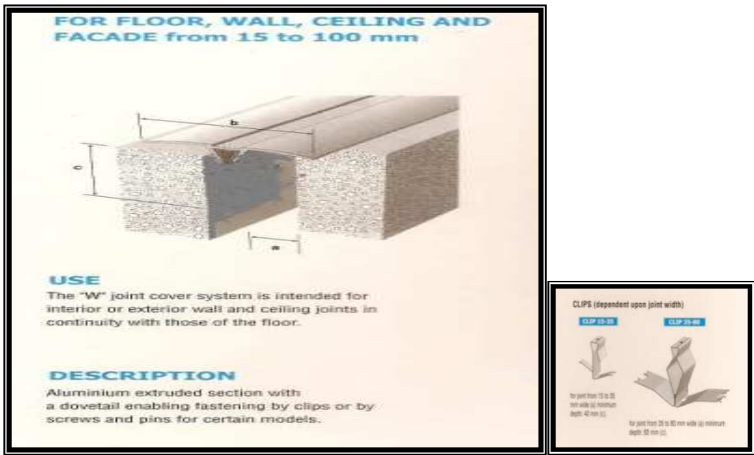
Talkatora Club, Park Street, New Delhi – 110001

# 011 2300 3578, 2300 3453 Email - [projects@victoriagroup.co.in](mailto:projects@victoriagroup.co.in), [wevictorians@yahoo.com](mailto:wevictorians@yahoo.com)

PDF Created with deskPDF PDF Creator X - Trial .. <http://www.docudesk.com>

Website: - [www.victoriagroup.co.in](http://www.victoriagroup.co.in)

Vistaaram – Floor / Wall Systems



Product Code – VM W Series

Suitable for Both Floor and Wall Joints

Aluminum Profile

- Aluminum Extrusion (Architectural Profile)
- Suitable for all level – Internal & External
- Extrude cover plate with assembly
- Easy to install
- Movement ± 50% to 100%, Suitable for 2”- 3” Joint width
- Application Area – Interior and Exterior Floor & Wall joints
- Cover plate available in Mill finish/Clear anodised

Sizes Available: 30mm – 75mm Joints’ Sizes

Vistaaram’s Roof Bellows are standard Black EPDM

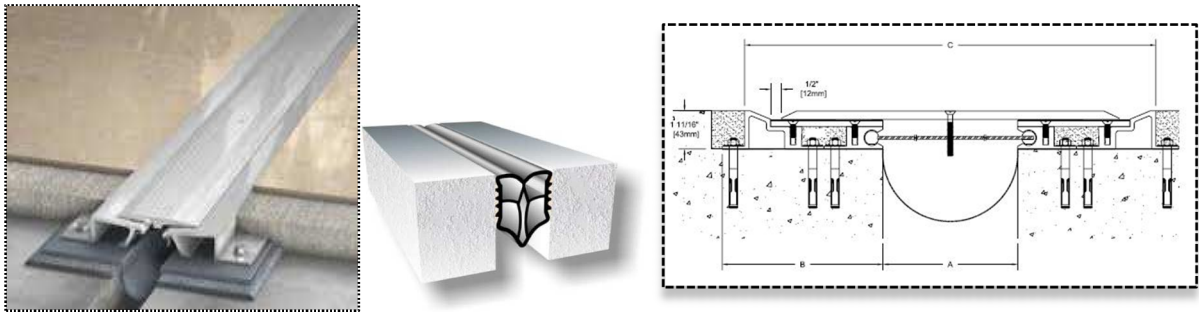
Joint Strips for Flat Floors					
JOINT WIDTH AT CONSTRUCTION (mm)	SECTION		COVER WIDTH (mm)	FASTENING	
	REF.	MATERIAL		No. OF CLIPS PER 3m LENGTH	REF.
15 to 35	W 70	Dural*	49	4	15-35
30 to 50	W 90	Dural*	90	10	35-80
35 to 80		Dural*	120	10	35-80

Installation Guidelines :

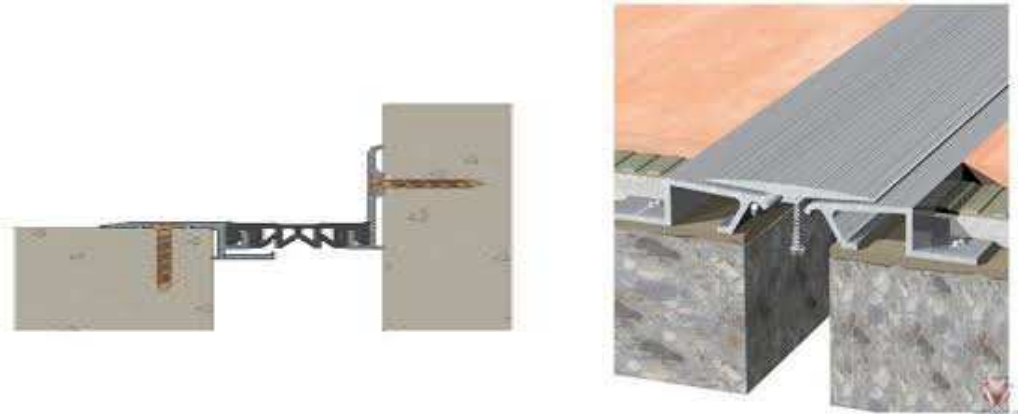
Make block out in the floor, it should be flat, levelled and completely dry. Broken edges must be repaired with Non shrink grout. Apply high strength 2k epoxy adhesive on both sides of block out and push seal into joint opening and set wings on wet epoxy bedding. Seal the edges with Polyurethane adhesive to make the joint watertight. Fix the Clips in the profile and just insert in the joint.



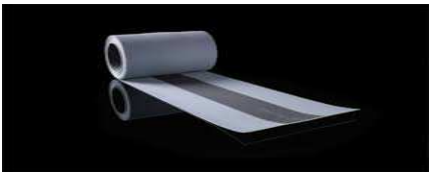
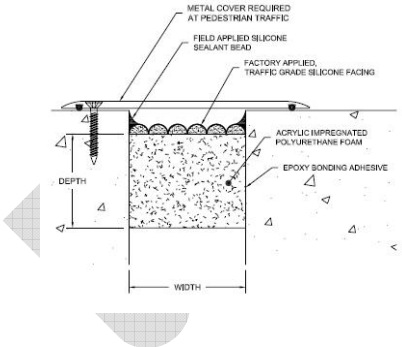
Vistaaram – Some other Systems and Profiles



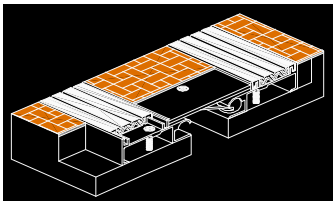
Joints Gasket & Systems



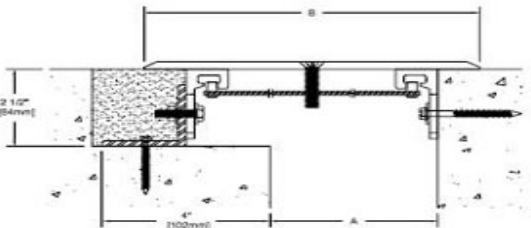
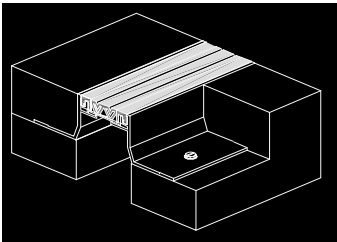
Compression Seals



FPO Membranes



Epoxy Adhesives



Victoria Uses quality products for the material development. We have developed the systems by practicalities of the projects and have come up with the most customised profiles. Victoria assures for 6063 alloy of aluminum for all profiles.

Victoria uses vapor barrier of the renowned company of Sika India with their specified epoxy adhesives.

EPDM Membrane of Carlisle Syntec of USA with the termination system recommended by the company.

Victoria Provides Complete Service

- Analyse - Project Requirements
- Design - Customised System
- Develop - Profile / System

Delivery - On Time

Installation - Best Applicators

Guidance - For Maintenance



Selection of Expansion / Seismic Joints Profiles

MULTI SEAL	VM ES SERIES	25-90 MM	<p>HOW DO I SELECT THE MOST SUITABLE EXPANSION JOINT TYPE?</p> <p>1. Select your application area in the table.</p> <p>2. Should the joint be watertight?</p> <p>3. What type of live loading will the joint be subjected to in service?</p> <p>4. Select width, height and movement capacity according to your needs.</p> <p>5. Detailed information about each joint type can be found in the relevant product brochure. Do you want to check your selection with us? Do you have any questions? Please don't hesitate to call us. Our product specialists will be happy to help you.</p>
RAMPS AND PARKINGS	VM WINGS	75-100 MM	
FLOOR TO FLOOR SERIES	VM WD CA	2-4"	
FLOOR TO FLOOR SERIES	VM WD CLIP	2-4"	
FLOOR TO FLOOR SERIES	VM WD	2-4"	
FLOOR & WALL SERIES	VM W SERIES	50 MM	
FLOOR & WALL SERIES	VM W SERIES	75 MM	
FLOOR TO FLOOR	VM FP 3	1-4"	
FLOOR TO WALL	VM FVP 3	1-4"	
FLOOR TO FLOOR	VM FPE 3	1-4"	
FLOOR TO WALL	VM FVPE 3	1-4"	
FLOOR TO FLOOR	VM PAN SERIES	2-10"	
WALL TO WALL	VM 9W	Upto 4"-6"	
WALL TO WALL	VM FCWW	Upto 4"-6"	
WALL TO WALL	VM WW9	2-8"	
ROOF TO ROOF	VM RLP	2-8"	

EXPANSION JOINTS NEEDED PROVIDED WATER TIGHTNESS WITH THE EXTRA LAYER WITH EPDM / COMBIFLEX MEMBRANE FIXED WITH EPOXY ADHESIVES

## Overview of Expansion Joint:

The word "Joint" is used in building parlance to cover elements which have to perform quite different functions in behavior, e.g. Slab Joints, beam-column joints and isolation joints. In the former the joint has to provide continuity of structural action between the members meeting at the joint. In the latter part the joint has to ensure separation between the adjacent members to allow one member to move independently of the other.

Expansion Joints require proper planning

Expansion Joints prevent structural damaging and corrosion to surface

The quality and durability of an expansion joint system depends greatly on its design and detailing. A good system thus includes preformed detail and connection pieces, supplemental components and installation aids.

Well proven solutions, also for Special Needs

