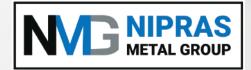


شركة نبراس المعدن للصناعة NIPRAS METAL INDUSTRY Co.

EXPANSION JOINT

















ABOUT NIPRAS

Nipras metal industry Co. is a professional steel grating supplier in Saudi Arabia. We are professionaly engaged in the production of all kinds of welded steel gratings.

Our company has owned all kinds of welding machines of over 30 sets and more than 100 staff members ensures high production efficiency and low production loss. More than 10 research and development department workers has been developing more products suitable for customers' requirements and marklet trends.

- > Founded in 2010
- Strict QC system in the production line.
- Standardized production under ISO 9001 International standard.
- > Wide range of steel grating for your option.
- Advanced equipment for efficient production and fast delivery.
- Rigorous and innovative spirits guide us become the leading enterprise





ENVIRONMENT



NIPRAS understands the nature of the relationship between corporate adoption of the concept of societal responsibility [availability of environmental awareness, clear vision of the impact of social responsibility on financial performance, managers informing employees of the latest developments in societal responsibility programs, managers' response to their corporate social responsibility (CSR) proposals] in the form of an annual report that supports the success of the company's objectives, the company's management encourages employees to participate collectively in societal responsibility programs and to protect the environment from pollution in the industry.







CIVIL SOCIETY



ENVIRONMENT



EMPLOYEES



HEALTH & SAFETY



"NIPRAS" as a manufacturing Company for Metal & Steel Products has a large number of hazards because of the strong internal as well as external forward and backward linkages in terms of material flows. Employees are to work in hazardous environment because of complicated equipment layouts, high temperatures, heavy equipment's, moving machinery, hazardous processes, heavy lifting and movements of materials in the work environment ETC. Further, several operations involve working at heights or in confined spaces. In short, working involves both very high volume as well as the complexity of operations which results into employees getting exposed to a high level of health and safety risks.

The health, safety, and protection of our employees, equipment, and the environment are perfectly calculated and implied as a crucial since it affects both economic and social factors.. On the other hand, a healthy and safe workplace contributes towards plants competitiveness as well as in profit growth.







SAFETY



OUR VISION OUR MISSION

OUR VISION

preferred partner for customers valuable and consistently exceeds our customer's needs and expectations in quality, delivery, and cost through continuous improvement and enhancing customer satisfaction. We go all out to manufacture, deliver and supply superior steel and metal products to our clients utilizing sustainable procedures that meet the international standards.



OUR MISSION

NIPRAS strives to strengthen its manufacturing base in the steel industry to serve the kingdom and contribute to its vision through effective utilization of staff and materials with cutting-edge technology and high productivity, consistent with modern management practices.





SOCIAL RESPONSIBILITY





We "NIPRAS" ability to sense, understand and react to others emotions while comprehending on social networks. (Social awareness which encompasses the competency of empathy is the ability to read non-verbal cues for negative emotions, particularly anger and fear and to judge the trustworthiness of others. It is about understanding others feelings, not experiencing them (Garner, 2009). NIPRAS accentuates on an individual's ability to identify, perceive and react to other's emotions while being a part of the social network circuitry. NIPRAS understand the ability to and be compassionate to the feelings, views, opinions and challenges of other people. Social-awareness cannot only be equated with understanding people's need but as well as caring for them (Coleman, 2006).



RESEARCH & DEVELOPMENT



VR & D refers to two intertwined processes of research (to identify new knowledge and ideas) and development (turning the ideas into tangible products or processes). Our Research and development (R&D) department includes activities that we undertake to innovate and introduce new products and services.

Develop products that create value for customers and expand the use of NIPRAS products worldwide

Improve NIPRAS competitiveness by developing new industrial processes – and optimising existing • ones – to reduce cost and improve quality

Contribute to sustainable development by reducing the environmental impact of products and processes

OBJECTIVES



- The aim of NIPRAS is to fabricate steel and metal work in the construction sector by the development of standards to turn raw metal into Architectural engineering solutions that can be used in construction.
- To assist clients, kingdom wide, by providing Architectural engineering solutions and expertise.
- To expand our business by offering the best in quality, cost and solutions.
- To provide our employees with the opportunity to develop their full potential within a safe and productive environment.
- To seek a competitive advantage by developing partnerships with clients, suppliers and subcontractors.



EXPANSION JOINTS

An expansion joint, or movement joint, is an assembly designed to hold parts together while safely absorbing temperature-induced expansion and contraction of building materials, and vibration, or to allow movement due to ground settlement or seismic activity through santoprene gasket or Neoprene seal and an optional barrier.





- Expansion joints permits thermal contraction and expansion without inducing stresses into the elements.
- An expansion joint is designed to absorb safely the expansion and contraction of several construction materials, absorb vibrations, and permit soil movements due to earthquakes or ground settlement.
- The expansion joints are normally located between sections of bridges, paving slabs, railway tracks, and piping systems.
- The expansion joints are incorporated to endure the stresses.
- An expansion joint is simply a disconnection between segments of the same materials.



REASON FOR USING EXPANSION JONTS

• Expansion joints are used as a transition between two surfaces and they help to absorb movement. Since they are a rubber extrusion, they are made of rubber and silicone in order to fill a gap or complete a seal.

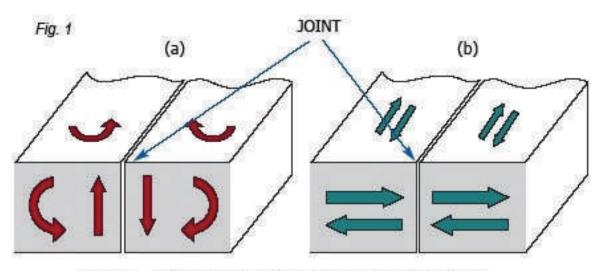
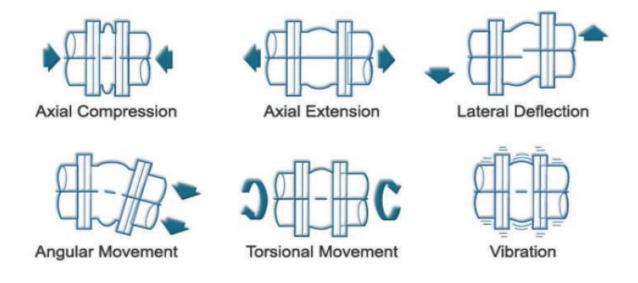


Figure 1 – Relative movements which must be (b) allowed and (a) not allowed by a con-struction joint for concrete slabs





- Another reason expansion joint is important, because they can be used when there is a concern
 of structural damage due to the expansion or contraction of those surfaces.
- And finally, expansion joints are important because they are custom designed and extruded based specifically on their application and purpose.

MATERIALS

1)Frame: Aluminium (AL - 6063 T6, AA 6061-T6)

Stainless Steel (SS 304, SS 316 & SS 316L)

2)Seal: Santoprene

Neoprene

Vinyl

Silicon

3) Support Plate: Aluminium (AL 6036-T6)



PRODUCT RANGE





INDEX

Name of Joint	Image	Size	Application	Material
Thermal Joint	Let-et	1"-3"	Pedestrian walk Floor-to-Floor Floor-to-Wall	Frame: Aluminium Support: Aluminium Seal: Santoprene Optional: Vapor, Water, Fire Barrier
Thermal Joint		2"-8"	Pedestrian walk Floor-to-Floor Floor-to-Wall Wall-to-Wall Wall-to-Corner	Frame: Aluminium Support: Aluminium Seal: Santoprene Optional: Vapor, Water, Fire Barrier
Thermal Joint		1"-3"	Wall-to-Wall Wall-to-Corner	Frame: Aluminium Support: Aluminium Seal: Gasket Optional: Vapor, Water, Fire Barrier
Field Limitation Joint		9 mm	Ceramic tiles Gap Floor to Floor	Frame: Aluminium/ Stainless steel/ Bronze Seal: Santoprene
Seismic Joint		1"-3"	Pedestrian walk Floor-to-Floor Floor-to-Wall	Frame: Aluminium Support: Aluminium Seal: Flexible Vinyl Gasket Optional: Vapor, Water, Fire Barrier



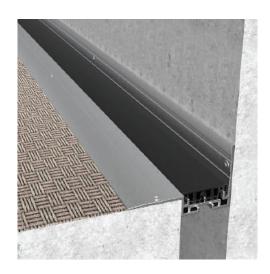
Seismic Joint (All Aluminium)	10"	Pedestrian walk Floor-to-Floor Floor-to-Wall	Frame: Aluminium Support: Aluminium Seal: Flexible Vinyl Gasket Optional: Vapor, Fire Barrier
Seismic Joint (All SS)	10"	Pedestrian walk Floor-to-Floor Floor-to-Wall	Frame: Aluminium Support: Aluminium Seal: Flexible Vinyl Gasket Optional: Vapor, Fire Barrier
Seismic Joint (All Brass)	10"	Pedestrian walk Floor-to-Floor Floor-to-Wall	Frame: Aluminium Support: Aluminium Seal: Flexible Vinyl Gasket Optional: Vapor, Fire Barrier
Seismic Joint	2"-12"	Vehicle Movements Floor-to-Floor Floor-to-Wall	Frame: Aluminium Support: Aluminium Seal: Flexible Vinyl Gasket Optional: Vapor, Fire Barrier
Seismic Joint	2"-12"	Wall-to-Wall Wall-to-Corner	Frame: Aluminium Support: Aluminium Seal: Elastomeric Seal Optional: Vapor, Fire Barrier



Seismic Joint		1"-24"	Wall-to-Wall Wall-to-Corner	Frame: Aluminium Seal: Silicone Optional: Vapor, Fire Barrier
Seismic Joint		1"-6"	Ceiling-to- Ceiling Ceiling-to- Corner	Frame: Aluminium Seal: Silicone Optional: Fire Barrier
Seismic Joint		1"-4"	Parking Decks Floor-to-Floor Floor-to-Corner	Frame: Aluminium Seal: Silicone Optional: Fire Barrier
Seismic Joint	NA TO	1"-4"	Bridges Floor-to-Floor Floor-to-Corner	Frame: Aluminium Support: Aluminium Seal: Flexible Vinyl Gasket Optional: Vapor, Fire Barrier
Seismic Joint		2"-12"	Roof-to-Roof Roof-to-Corner	Frame: Aluminium Support: Aluminium Seal: Neoprene Optional: Water, Fire Barrier
Fire Rated		1"-20"	Commercial & Residential Area Floor, Walls, Ceilings.	Frame: Stainless Steel Fire Seal: Ceramic Blanket Insulation
Fire Rated		1"-5"	Commercial & Residential Area Floor, Walls, Ceilings.	Frame: Stainless Steel Fire Seal: Mineral Wool

THERMAL EXPANSION JOINTS





These are Floor to Floor/ Floor to Wall thermal expansion joint covers & features various design as per requirement. The flexible seal provides a secure fit and yet retains flexibility. Dual flexible seals absorb limited serviceable seismic movement and provide a secure fit and optimal flexibility. Snap-fit design provides for easy on-site installation while an optional vapor barrier slides into the frame for easy installation. System available with Brass Top (BT), Stainless Steel Top (ST), Brass Cap (BC), Steel Cap (SC) and Brass inserts.

Application: Floor to Floor/ Floor to Wall Joint Width: 1"-3"

Movement: +/- 25%

Max Load: 3 Ton

Optional: Vapor/ Water/ Fire Barrier



KEY TO SYSTEM FEATURES (STRAIGHT APPLICATION)

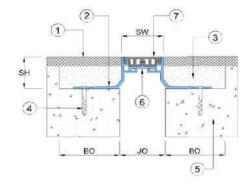
- 1. Continuous Aluminum
- 2. Recessed frame, Grade 6063-T6
- 3. Backfill (by others)
- 4. Flat Head Concrete Screw (by others)
- 5. Concrete Slab
- 6. Continuous Aluminum Support Plate,

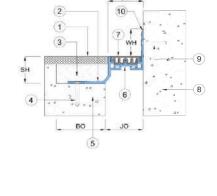
Grade 6063-T6 (Applicable in 50mm & 75mm Joint Opening Only)

7. Continuous Santoprene Seal

KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- 1. Floor Finish (by others)
- 2. Continuous Aluminum
- 3. Recessed frame, Grade 6063-T6
- 4. Backfill (by others)
- 5. Flat Head Concrete Screw (by others)
- 6. Concrete Slab
- 7. Continuous Aluminum Support plate, Grade 6063-T6 (50mm & 75mm J.O. Only)
- 8. Continuous Santoprene Seal
- 9. Concrete Wall
- 10. Flat Head Concrete Screw (by others)
- 11. Continuous Aluminum
- 12. Flush wall frame, Grade 6063-T6







	JO							
Application		Milli	meter			Horizontal	Vertical	Load(T)
	25	38	25	64	*	25	25	3
Straight	38	38	38	64	*	25	25	3
	50	50	47	64	*	25	25	2
	75	50	73	64	*	25	25	2
	25	38	25	64	40	25	25	3
Corner	38	38	38	64	40	25	25	3
	50	50	47	64	40	25	25	2
	75	50	73	64	40	25	25	2

JO = Joint Opening

SH = System Height

SW = Sight Width

BO = Block-out (min.)

WH = Wall Height (approx.)



THERMAL EXPANSION JOINT





This is a Floor to Floor/ Floor to Corner/ Wall to Wall & Wall to Corner Thermal Expansion Joint Cover, featuring recessed-mount frames that minimize sight lines, and a snap-fit design for easy on-site assembly. The dual flexible seals provide a secure fit and yet retain optimal flexibility and absorb limited serviceable seismic movement. Extra wide joint widths are available, as well as an optional vapor barrier that slides into the frame for easy installation. Additional options include water & fire barrier.

Application: Floor to Floor floor to Wall/Wall to Wall & Wall to Corner

Movement: +/- 25%

Joint width: 2"-8"

Max Load: 3 Ton

Optional: Vapor/water/fire barrier



KEY TO SYSTEM FEATURES (STRAIGHT APPLICATION)

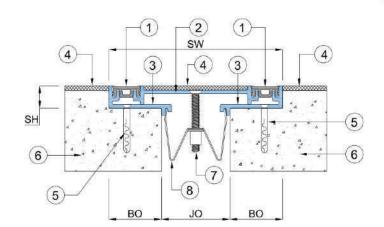
- 1. Continuous Santoprene Seal
- 2. Continuous Aluminum

Center frame, Grade 6063-T6

3. Continuous Aluminum

Recessed frame, Grade 6063-T6

- 4. Floor finish (by others)
- Flat Head Concrete Screw(by others)
- 6. Concrete Slab (by others)
- 7. Flat Head Center Screw
- 8. Metal Spring Clip



KEY TO SYSTEM FEATURES (CORNER APPLICATION)

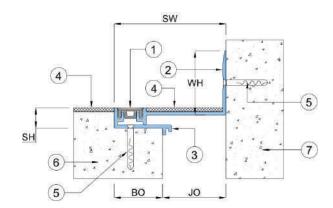
- 1. Continuous Santoprene Seal
- 2. Continuous Aluminum

Corner frame, Grade 6063-T6

3. Continuous Aluminum

Recessed frame, Grade 6063-T6

- 4. Floor finish (by others)
- Flat Head Concrete Screw(by others)
- 6. Concrete Slab (by others)
- 7. Concrete Wall (by others)





Application	JO SH SW BO WH ± Movement (%)							Load (T)	
		M	illimet	er		Horizontal	Vertical	Shear	
	51	16	125	38	*	25	25	Minor	3
Straight	102	16	240	70	*	25	25	Minor	2
	152	16	290	70	*	25	25	Minor	1
	203	16	340	70	*	25	25	Minor	1
	51	16	90	38	50	12.5	12.5	Minor	3
Corner	102	16	170	70	50	12.5	12.5	Minor	2
Gorner	152	16	220	70	50	12.5	12.5	Minor	1
	203	16	270	70	50	12.5	12.5	Minor	1

JO = Joint Opening

SH = System Height

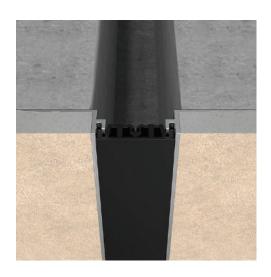
SW = Sight Width

BO = Block-out (min.)

WH = Wall Height (approx.)



THERMAL EXPANSION JOINT (WALL)





This is a Wall-to-Wall or Wall-to-Corner Thermal Expansion Joint Cover with a Recess Mount that's adaptable to any 5/8" wall and ceiling finish, including drywall, plaster and tile. The recessed mount frame creates a minimal sightline while our snap-fit design provides for easy on-site assembly. The dual flexible seals offer a secure fit and yet retain optimal flexibility and absorb limited serviceable seismic movement.

Application: Wall to wall, Wall to Corner

Movement: +/- 25%

Joint width: 1"-3"

Optional: Vapor/ Water/ Fire barrier

Wider Joint Cover available at request

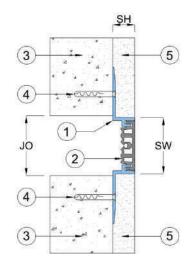


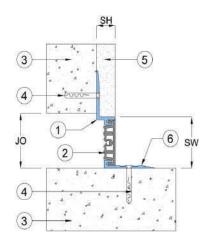
KEY TO SYSTEM FEATURES

- Continuous Aluminum
 Recessed frame, grade 6063-T6
- 2. Continuous Silicone Gasket
- 3. Concrete Wall (by others)
- 4. Flat Head Concrete Screw (by others)
- 5. Drywall (by others)

KEY TO SYSTEM FEATURES

- Continuous Aluminum
 Recessed frame, grade 6063-T6
- 2. Continuous Silicone Gasket
- 3. Concrete Wall (by others)
- 4. Flat Head Concrete Screw (by others)
- 5. Drywall (by others)
- 6. Continuous Surface mount
 Aluminum frame, grade 6063-T6







	JO	O SH SW		± Me	± Movement (%)				
Application	N	Millimet	er	Horizontal	Horizontal Vertical Shear				
	25	19	25	25	25	Narrow	*		
Straight	50	19	48	25	25	Narrow	*		
	75	19	73	25	25	Narrow	*		
	25	19	25	25	25	Narrow	*		
Corner	50	19	48	25	25	Narrow	*		
	75	19	73	25	25	Narrow	*		

JO = Joint Opening

SH = System Height

SW = Sight Width



CERAMIC TILE JOINT





This Series is a field limitation joint made up of Aluminium/Stainless Steel/ Brass profiles with durable and UV resistant santoprene and anchoring steel. Very minimal sightline and is specially design to absorb ceramic tile movements.

Usage: Floor

Movement: +/- 15%

Joint width: 9mm



Application	JO	SH	SW	± N			
ripplication	N	Millimete	er	Horizontal	Vertical	Shear	Load (T)
	*	30	9	Limited	*	*	*
Straight (Aluminium)	*	40	9	Limited	*	*	*
	*	50	9	Limited	*	*	*
Churcialet	*	30	9	Limited	*	*	*
Straight (Stainless Steel)	*	40	9	Limited	*	*	*
	*	50	9	Limited	*	*	*
	*	30	9	Limited	*	*	*
Straight (Bronze)	*	40	9	Limited	*	*	*
	*	50	9	Limited	*	*	*

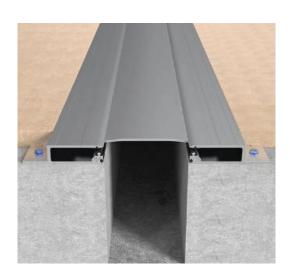
0 = Joint Opening

SH = System Height

SW = Sight Width



SEISMIC EXPANSION JOINTS





This is a Floor to Floor/ Floor to Wall Seismic Expansion Joint Cover, featuring a Glide Plate System. Its NO-BUMP configuration makes the system ADA Compliant, while the recessed frame accommodates all floor finishes including concrete, terrazzo, tile, VCT, and carpet. This Cover Plate is available in Anodized, Powder Coat or Mill Finish.

Application: Floor to Floor/ Floor to Wall

Movement: +/- 50%

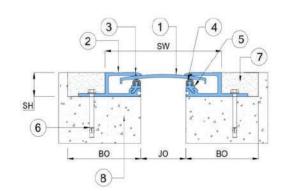
Joint width: 1" - 6"

Optional: Vapor/Water/Fire Barrier



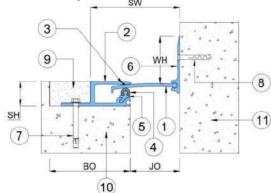
KEY TO SYSTEM FEATURES (STRAIGHT APPLICATION)

- Continuous Aluminum Glide Plate Grade 6063-T6
- Continuous Aluminum Recessed Frame Grade 6063-T6
- 3. Extruded Elastomeric Membrane
- 4. Continuous Flexible Vinyl Gasket
- 5. Continuous Aluminum Slide-in Upstand
- 6. Hex Head Concrete Screw (by others)
- 7. Backfill (by others)



KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- Continuous Aluminum Glide Half Plate Grade 6063-T6
- Continuous Aluminum Recessed Frame Grade 6063-T6
- 3. Extruded Elastomeric Membrane
- 4. Continuous Flexible Vinyl Gasket
- 5. Continuous Aluminum Slide-in Upstand
- 6. Continuous Aluminum Flush Wall Frame Grade 6063-T6
- 7. Hex Head Concrete Screw (by others)
- 8. Flat Head Concrete Sleeve Anchor
- 9. Backfill (by others)





	JO	SH	SW	ВО	±]	Movement (%)	
Application		Millir	neter		Horizontal	Vertical	Shear	Load (Ton)
	25	25	83	70	50	25	Excellent	4
	51	25	133	83	50	25	Excellent	3
Straight	76	25	181	95	50	25	Excellent	2
	102	25	232	108	50	25	Excellent	1
	152	25	333	133	50	25	Excellent	1
	25	25	54	70	25	12.5	Excellent	4
	51	25	92	83	25	12.5	Excellent	3
Corner	76	25	127	95	25	12.5	Excellent	2
	102	25	168	108	25	12.5	Excellent	1
	152	25	241	133	25	12.5	Excellent	1

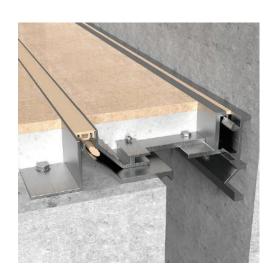
JO = Joint Opening **SH** = System Height

SW = Sight Width **BO** = Block-out



SEISMIC EXPANSION JOINTS (ALL ALUMINUM SERIES)





This is a Floor to Floor or Wall to Wall all aluminum Seismic Expansion Joint Cover, featuring a POP-UP System, which is ideal for high grade marble, granite, limestone and paver floor/wall finishes. The dual flexible seals offer a secure fit and yet retain flexibility and absorb limit serviceable seismic movement.

Application: Floor to Floor or Wall to Wall

Movement: +/- 50%, +/- 100%

Joint width: 10"

Optional: Vapor/Fire barrier

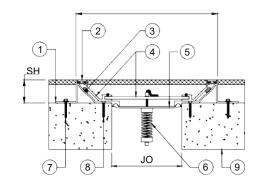


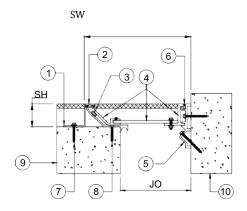
KEY TO SYSTEM FEATURES

- 1. Continuous Aluminum Recessed Frame, grade 6063-T6
- 2. Continuous Santoprene Seal
- 3. Backer Rod (By others)
- 4. Continuous Aluminum Recessed Pan Assembly, Grade 6063-T6 (Straight)
- 5. Steel Centering Bar
- 6. Compression Spring Assembly
- 7. Hex Washer Head Concrete Screw (by others)
- 8. Flat Head Concrete Screw (by others)
- 9. Concrete Slab (by others)

KEY TO SYSTEM FEATURES

- 1. Continuous Aluminum Recessed Frame, grade6063-T6
- 2. Continuous Santoprene Seal
- 3. Backer Rod (By others)
- 4. Continuous Aluminum Recessed Pan Assembly, Grade 6063-T6 (Corner)
- Continuous Aluminum Variable Frame, Grade 6063-T6
- 6. Sealant (by others)
- 7. Hex Washer Head Concrete Screw (by others)
- 8. Flat Head Concrete Screw (by others)
- 9. Concrete Slab (by others)
- .0. Concrete Wall (by others)







Application	JO	SH	SW	± Mo	Load(T)		
Application		Millimet	er	Horizontal	Vertical	Shear	Load(T)
	102	50	258	100	25	Excellent	1
Straight	152	50	309	100	25	Excellent	1
Straight	203	50	360	100	25	Excellent	1
	254	50	411	100	25	Excellent	1
	102	50	180	100	25	Excellent	1
Corner	152	50	231	100	25	Excellent	1
Corner	203	50	281	100	25	Excellent	1
	254	50	332	100	25	Excellent	1

JO = Joint Opening

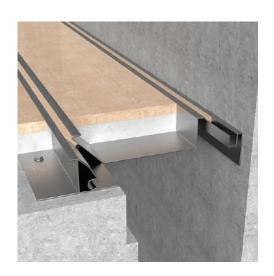
SH = System Height

SW = Sight Width



SEISMIC EXPANSION JOINTS (ALL STAINLESS STEEL SERIES)





This is a Floor to Floor or Wall to Wall all Stainless-Steel (SS 304 or 316) Seismic Expansion Joint Cover, featuring a POP-UP System, which is ideal for high grade marble, granite, limestone and paver floor/wall finishes. The dual flexible seals offer a secure fit and yet retain flexibility and absorb limit serviceable seismic movement.

Application: Floor to Floor or Wall to Wall

Movement: +/- 50%, +/- 100%

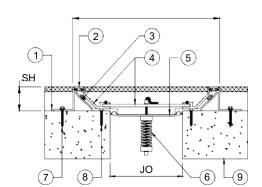
Joint width: 10"

Optional: Vapor/Fire barrier



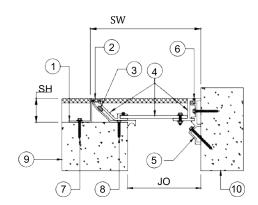
KEY TO SYSTEM FEATURES

- 1. Continuous Stainless steel Recessed Frame
- 2. Continuous Santoprene Seal
- 3. Backer Rod (By others)
- Continuous Stainless steel Recessed Pan Assembly.
- 5. Steel Centering Bar
- 6. Compression Spring Assembly
- 7. Hex Washer Head Concrete Screw (by others)
- 8. Flat Head Concrete Screw (by others)
- 9. Concrete Slab (by others)



KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- 1. Continuous Stainless steel Recessed Frame
- 2. Continuous Santoprene Seal
- 3. Backer Rod (By others)
- 4. Continuous Stainless steel Recessed Pan Assembly
- 5. Continuous Stainless steel Variable Frame
- 6. Sealant (by others)
- 7. Hex Washer Head Concrete Screw (by others)
- 8. Flat Head Concrete Screw (by others)
- 9. Concrete Slab (by others)
- 10. Concrete Wall (by others)





Application	JO SH		SW	±	Movement	(%)	
Application	М	illimeter		Horizontal	Vertical	Shear	Load (T)
	51	50	206	100	12.5	Excellent	3
	76	50	231	100	12.5	Excellent	2
Straight	102	50	257	100	12.5	Excellent	1
	152	50	308	100	12.5	Excellent	1
	203	50	359	100	12.5	Excellent	1
	51	50	206	100	12.5	Excellent	3
	76	50	231	100	12.5	Excellent	2
Corner	102	50	257	100	12.5	Excellent	1
	152	50	308	100	12.5	Excellent	1
	203	50	359	100	12.5	Excellent	1

JO = Joint Opening **SH** = System Height **SW** = Sight



SEISMIC EXPANSION JOINTS (ALL BASS SERIES)





This is a Floor to Floor or Wall to Wall all Brass Seismic Expansion Joint Cover, featuring a POP-UP System, which is ideal for high grade marble, granite, limestone and paver floor/wall finishes. The dual flexible seals offer a secure fit and yet retain flexibility and absorb limit serviceable seismic movement.

Application: Floor to Floor or Wall to Wall

Movement: +/- 50%, +/- 100%

Joint width: 10"

Optional: Vapor/Fire barrier

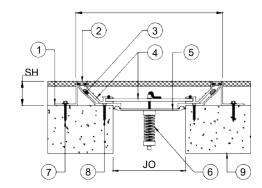


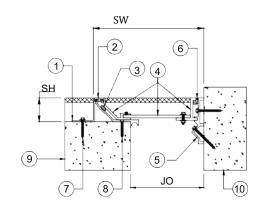
KEY TO SYSTEM FEATURES

- 1. Continuous Brass Recessed Frame,
- 2. Continuous Santoprene Seal
- 3. Backer Rod (By others)
- 4. Continuous Brass Recessed Pan Assembly, Grade 6063-T6 (Straight)
- 5. Steel Centering Bar
- 6. Compression Spring Assembly
- 7. Hex Washer Head Concrete Screw (by others)
- 8. Flat Head Concrete Screw (by others)
- 9. Concrete Slab (by others)

KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- 1. Continuous Brass Recessed Frame
- 2. Continuous Santoprene Seal
- 3. Backer Rod (By others)
- 4. Continuous Brass Recessed Pan Assembly
- 5. Continuous Brass Variable Frame
- 6. Sealant (by others)
- 7. Hex Washer Head Concrete Screw (by others)
- 8. Flat Head Concrete Screw (by others)
- 9. Concrete Slab (by others)
- 10. Concrete Wall (by others)







Application	JO	SH	SW	± Movement (%)			
пррпсасіон	M	lillimete	er	Horizontal	Vertical	Shear	Load (T)
	51	50	206	100	12.5	Excellent	3
Straight	76	50	231	100	12.5	Excellent	2
	102	50	257	100	12.5	Excellent	1
	152	50	308	100	12.5	Excellent	1
	203	50	359	100	12.5	Excellent	1
	51	50	206	100	12.5	Excellent	3
	76	50	231	100	12.5	Excellent	2
Corner	102	50	257	100	12.5	Excellent	1
	152	50	308	100	12.5	Excellent	1
	203	50	359	100	12.5	Excellent	1

JO = Joint Opening **SH** = System Height **SW** = Sight



SEISMIC EXPANSION JOINTS (PARKING & WAREHOUSE)





This Floor-to-Floor Seismic Expansion Joint Cover is a high load bearing system ideal for vehicular traffic areas, such as parking garages and warehouses. This Heavy-Duty System is fully engineered for both pneumatic and solid tires. GGS Series features aluminum bases (AA6061-T651) with stainless steel (grade 316-L) cover plates. This system is specially designed to accommodate subfloors of variable heights.

Application: Floor to floor

Movement: +/- 50% Joint width: 2"-12"

Optional: Vapor/ Fire barrier



Application	JO	SH	SW	±]	Movement (%	o)		
Application	Mill	imeter		Horizontal	Vertical	Shear	Load (T)	
	51	94	201	50	50	Excellent	3.5	
Straight	76	94	261	50	50	Excellent	3.5	
	102	94	322	50	50	Excellent	3.5	
	152	94	452	50	50	Excellent	3	
	203	94	578	50	50	Excellent	3	
	254	94	714	50	50	Excellent	3	
	305	94	830	50	50	Excellent	3	
	51	94	129	50	13	Excellent	3.5	
	76	94	173	50	13	Excellent	3.5	
	102	94	225	50	13	Excellent	3.5	
Corner	152	94	330	50	13	Excellent	3	
	203	94	430	50	13	Excellent	3	
	254	94	531	50	13	Excellent	3	
	305	94	639	50	13	Excellent	3	

JO = Joint Opening

SH = System Height

SW = Sight Width



SEISMIC EXPANSION JOINTS (WALL TO WALL OR WALL TO CORNER)





This is a Wall-to-Wall Seismic Expansion Joint Cover, featuring a Glide Plate and Centering Bar System. Its 5/8" recessed frame is designed for drywall installations or can be surface mounted, while the snap-fit cover design makes for easy on-site assembly. Choose from several versatile finishes, including Anodized, Powder Coat or Mill Finish.

Application: Wall-to-Wall, Ceiling-to-Ceiling

Movement: +/- 50%

Joint width: 2" - 12"

Optional: Vapor/ Water/ Fire barrier

Shear movement unlimited

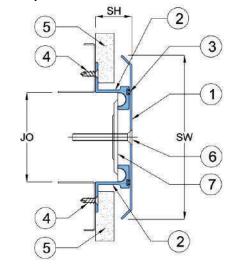


KEY TO SYSTEM FEATURES (STRAIGHT APPLICATION)

- Continuous Aluminum Center PlateGrade
 6063-T6
- Continuous Aluminum Recessed frame, Grade
 6063-T6
- 3. Extruded Elastomeric Seals
- 4. Fixing Screw (by others)
- 5. Gypsum dry wall (by others)
- 6. Flat Head Center Screw
- 7. Steel Centering Bar

KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- Continuous Aluminum Corner PlateGrade
 6063-T6
- Continuous Aluminum Recessed frame, Grade
 6063-T6
- 3. Extruded Elastomeric Seal
- 4. Fixing Screw (by others)
- 5. Gypsum dry wall (by others)
- 6. Concrete Wall (by others)



3

WH

SW

5



Analization	JO	SH	SW	WH	± N	lovement ((%)	Load (T)
Application		Millin	neter		Horizontal	Vertical	Shear	
	51	32	102	*	50	50	Excellent	*
	76	32	140	*	50	50	Excellent	*
Straight	102	32	178	*	50	50	Excellent	*
Straight	152	32	254	*	50	50	Excellent	*
	203	32	330	*	50	50	Excellent	*
	305	32	483	*	50	50	Excellent	*
	51	32	98	51	50	25	Excellent	*
	76	32	127	51	50	25	Excellent	*
Corner	102	32	164	51	50	25	Excellent	*
dorner	152	32	242	51	50	25	Excellent	*
	203	32	317	51	50	25	Excellent	*
	305	32	469	51	50	25	Excellent	*

JO = Joint Opening

SH = System Height

SW = Sight Width



SEISMIC EXPANSION JOINTS (WALL TO WALL)





This is a Wall to Wall or Ceiling to Ceiling Seismic Expansion Joint Cover, featuring a Centering Bar System for extra wide joints that eliminates need for an expensive pantograph. Even in ceiling-to-ceiling applications, the face of the seal resists sagging and remains flat. Meanwhile, the available extra-large length Santoprene/Vinyl/Silicon seals provide for weather-tight transitions.

Application: wall to wall, ceiling to ceiling

Movement: +/- 50%

Joint width: 1"- 24"

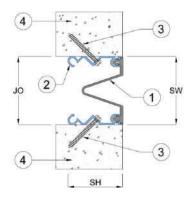
Optional: fire barrier

Wider joint cover available at request



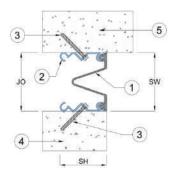
KEY TO SYSTEM FEATURES

- 1. Continuous Silicone Gasket (Design May vary)
- 2. Continuous Aluminium Frame, Grade 6036-T6, Mill finish
- 3. Concrete Screw with Plug (By Others)
- 4. Concrete Wall (By Others)



KEY TO SYSTEM FEATURES

- 1. Continuous Silicone Gasket (Design May vary)
- 2. Continuous Aluminium Frame, Grade 6036-T6, Mill finish
- 3. Concrete Screw with Plug (By Others)
- 4. Concrete Wall (By Others)



	JO	SH	SW	± Move	ement (%)		Load	
Application	Mil	limeter		Horizontal	Vertical	Shear	(T)	
	42	60	42	50	50	Excellent	*	
	51	60	51	50	50	Excellent	*	
	76	60	76	50	50	Excellent	*	
	102	60	102	50	50	Excellent	*	
Straight	152	60	152	50	50	Excellent	*	
G	203	75	203	50	50	Excellent	*	
	254	75	254	50	50	Excellent	*	
	305	75	305	50	50	Excellent	*	
	457	75	457	50	50	Excellent	*	
	610	75	610	50	50	Excellent	*	
	42	60	42	50	50	Excellent	*	
	51	60	51	50	50	Excellent	*	
	76	60	76	50	50	Excellent	*	
	102	60	102	50	50	Excellent	*	
Corner	152	60	152	50	50	Excellent	*	
	203	75	203	50	50	Excellent	*	
	254	75	254	50	50	Excellent	*	
	305	75	305	50	50	Excellent	*	
	457	75	457	50	50	Excellent	*	
	610	75	610	50	50	Excellent	*	

JO = Joint Opening

SH = System Height

SW = Sight Width



SEIŞMIC JOINT (CEILING-TO-JOINT)





This is a Ceiling-to-Ceiling/ Ceiling-to-wall Seismic Expansion Joint Cover, featuring a Santoprene/Vinyl/Silicon seal design that allows for fluid seismic movement during joint expansion and contraction. Unique seal barbs provide for secure engagement in the frame, making installation easier. Meanwhile, the frame pop rivets to any T-Bar profile in suspended ceiling systems.

Application: Ceiling-to-Ceiling, Ceiling-to-wall

Movement: +/- 50%

Joint width: 1" - 6"

Optional: Fire barrier

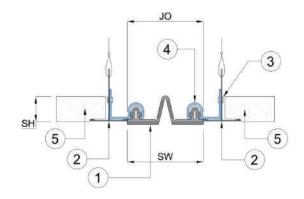


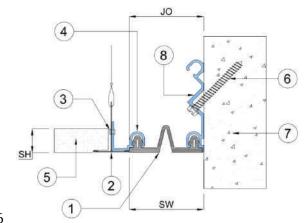
KEY TO SYSTEM FEATURES

- Continuous Silicone Gasket (Design may vary for wider gaps)
- 2. Ceiling Tee (by others)
- 3. Pop Rivet (by others)
- 4. Continuous Aluminum Profile grade 6063-T6
- 5. Ceiling Panel (by others)

KEY TO SYSTEM FEATURES

- Continuous Silicone Gasket (Design may vary for wider gaps)
- 2. Ceiling Tee (by others)
- 3. Pop Rivet (by others)
- 4. Continuous Aluminum Profilegrade 6063-T6
- 5. Ceiling Panel (by others)
- 6. Concrete Screw (by others)
- 7. Concrete Wall (by others)
- 8. Continuous Aluminumflush mount frame grade 6063-T6





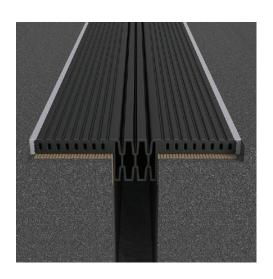


	JO	SH	SW	± Mov	vement (%)		Load(T)
Application	M	lillimeter		Horizontal	Vertical	Shear	
	38	16	38	50	50	Excellent	*
	51	16	51	50	50	Excellent	*
Straight	76	16	76	50	50	Excellent	*
	102	16	102	50	50	Excellent	*
	152	16	152	50	50	Excellent	*
	42	16	42	50	50	Excellent	*
_	51	16	51	50	50	Excellent	*
Corner	76	16	76	50	50	Excellent	*
	102	16	102	50	50	Excellent	*
	152	16	152	50	50	Excellent	*

JO = Joint Opening **SH** = System Height **SW** = Sight



SEISMIC JOINT (PARKING DECKS)





This is an Interior/Exterior Seismic Expansion Joint Cover designed for Parking Decks. This Santoprene/Neoprene/EPDM seal system installs with high strength epoxy adhesive and provides a level top surface ideal for pedestrian traffic. This is suitable for watertight applications.

Application: floor

Joint width: 1" - 4"

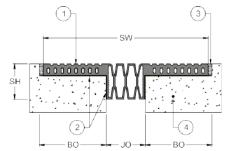
Movement: +/- 50%

Optional: fire barrier



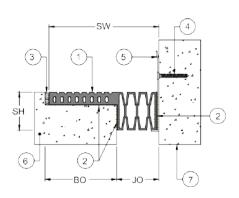
KEY TO SYSTEM FEATURES (STRAIGHT APPLICATION)

- 1. Extruded EPDM Compression Seal
- 2. Adhesive (Sikadur-31 CF Slow) (by others)
- 3. Sealant (by others)
- 4. Concrete Slab (by others)



KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- 1. Extruded EPDM Compression Seal
- 2. Adhesive (Sikadur-31 CF Slow) (by others)
- 3. Sealant (by others)
- 4. Concrete Screw (by others)
- 5. Continuous Aluminum Flange
- 6. Concrete Slab (by others)
- 7. Concrete Wall (by others)





Application	JO	SH	SW	ВО	± Mo	vement (%)		I I (T)
		Millim	neter		Horizontal	Vertical	Shear	Load (T)
Straight	25	46	188	86	50	50	Excellent	*
	51	46	214	86	50	50	Excellent	*
Straight	76	46	239	86	50	50	Excellent	*
	102	46	264	86	50	50	Excellent	*
	25	46	107	86	50	50	Excellent	*
Corner	51	46	132	86	50	50	Excellent	*
Corner	76	46	158	86	50	50	Excellent	*
	102	46	183	86	50	50	Excellent	*

JO = Joint Opening

SH = System Height **SW** = Sight Width

BO = Block out



BRIDGES & COMMERCIAL KITCHEN EXPANSION JOINTS





This is a floor-to-floor Thermal Expansion Joint Cover, featuring a recessed mount design that's ideal for bridges as well as commercial kitchens. EPDM/NEOPRENE Seals is ideal for movement tractability as well as water tightness. It has a beautifully engraved LOGO on SS top for aesthetic purposes. This system is specially designed to accommodate sub-floors of variable heights.

Application: Floor to Floor

Joint Width: 1"-4"

Movement: +/- 50%

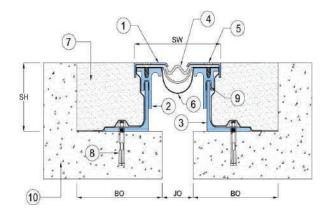
Max Load: 5 Ton

Optional: Fire Barrier



KEY TO SYSTEM FEATURES (STRAIGHT APPLICATION)

- 1. Continuous Aluminum top, grade 6063-T6
- 2. Continuous Aluminum Frame, grade 6063-T6
- 3. Continuous Aluminum Angle frame, grade 6063-T6
- 4. Continuous Neoprene Gasket
- 5. Allen Key fixing Hex. Head Countersunk screw
- 6. Secondary Seal to be fused with water proofing membrane
- 7. Concrete Screed (by others)
- 8. Fixing Screw (by others)
- 9. Metal clip
- 10. Concrete floor (by others)

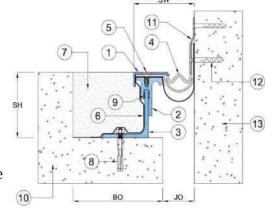




KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- 1. Continuous Aluminum Top, grade 6063-T6
- 2. Continuous Aluminum Frame, grade 6063-T6
- 3. Continuous Aluminum
- 4. Angle frame, grade 6063-T6
- 5. Continuous Neoprene Gasket
- 6. Allen Key fixing Hex. Head Countersunk screw
- 7. Secondary Seal to be fused with water proofing membrane
- 8. Concrete Screed (by others)
- 9. Fixing Screw (by others)
- 10. Metal clip
- 11. Concrete floor (by others) 12. Flat Head Concrete Screw with Plug (by others)

Continuous Metal Flashing 13.Concrete wall (by others)





Application	JO	SH	SW	ВО	± Moveme	nt (%)	Load(T)	
		Millimet	er		Horizontal	Vertical		
	25	70/80/105	122	210	50	50	5	
	51	70/80/105	143	210	50	50	5	
Straight	76	70/80/105	170	210	50	50	5	
	102	70/80/105	194	210	50	50	5	
	25	70/80/105	74	210	50	50	5	
	51	70/80/105	96	210	50	50	5	
Corner	76	70/80/105	123	210	50	50	5	
	102	70/80/105	148	210	50	50	5	

JO = Joint Opening **SH** = System Height **SW** = Sight Width **BO** = Block out



ROOF TO ROOF EXPANSION JOINT





This is a Roof-to-Roof Expansion Joint System, featuring Neoprene weather washers that prevent leaking where fasteners penetrate frames or expansion joint covers. Factory Formed Transitions and Plate in stainless steel are both available. Vapor barrier included, while optional water & fire barrier are also available.

Application: Roof-to-Roof

Movement: +/- 50%

Joint width: 2"- 12"

Optional: Fire barrier

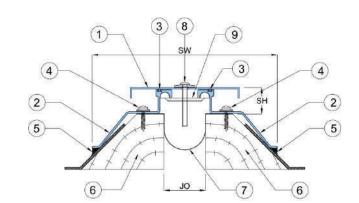


KEY TO SYSTEM FEATURES (STRAIGHT APPLICATION)

- Continuous Aluminum Center plate, Grade 6063-T6
- 2. Continuous Aluminum

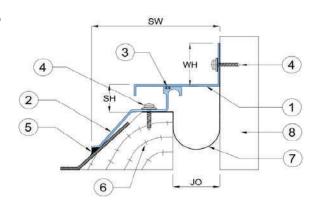
base frame, Grade 6063-T6

- 3. Extruded Elastomeric Seals
- Water tight Fixing Screw(by others)
- 5. Optional Caulking (by others)
- 6. Upstand (by others)
- 7. EPDM vapor barrier
- 8. Water tight center screw
- 9. Metal Centering Bar



KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- 1. Continuous Aluminum Corner plate, Grade 6063-T6
- 2. Continuous Aluminum base frame, Grade 6063-T6
- 3. Extruded Elastomeric Seal
- Water tight Fixing Screw(by others)
- 5. Optional Caulking (by others)
- 6. Upstand (by others)
- 7. EPDM vapor barrier
- 8. Parapet Wall





	JO	SH	SW	WH	± Mo	ovement (%	%)	I l(T)
Application		Milli	meter		Horizontal	Vertical	Shear	Load(T)
	51	33	226	*	50	50	Excellent	*
	76	33	251	*	50	50	Excellent	*
Straight	102	33	277	*	50	50	Excellent	*
Straight	152	33	327	*	50	50	Excellent	*
	203	33	378	*	50	50	Excellent	*
	305	33	400	*	50	50	Excellent	*
	51	33	140	51	50	50	Excellent	*
	76	33	165	51	50	50	Excellent	*
Cornor	102	33	200	51	50	50	Excellent	*
Corner	152	33	250	51	50	50	Excellent	*
	203	33	300	51	50	50	Excellent	*
	305	33	400	51	50	50	Excellent	*

JO = Joint Opening

SH = System Height **SW** = Sight Width



FIRE RATED EXPANSION JOINT (THERMAL & SEISMIC MOVEMENTS)



This Fire Blanket Systems are designed to accommodate Thermal & Seismic Movements and still meet tough 2-hour fire ratings. Our industry-beating lead time keeps up with aggressive construction schedules while standardized flanges simplify part inventory. This system is fire tested for use with cover plates 22 gauge (1/32") and thicker or virtually any extruded metal shape. The design adapts to variability in construction, and compensates for surface imperfections that could otherwise affect product effectiveness. It offers a Class IV movement rating - the highest possible, meaning it's effective even when fatigued over time. Chase wall covers are also available.

Characteristics:

Accommodates nominal joint widths from 1" to 20"

Tolerates 50% seismic movement.

2-hour rating meets UL-2079, ASTM E-1399, ASTM E-1966; 3- & 4-hour ratings available. Installs with retaining flanges.

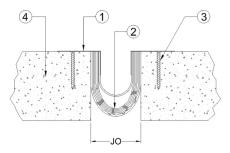
Meets "Hose Stream Test" for vertical wall applications.

Tested and approved to globally recognized standard

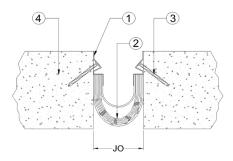


KEY TO SYSTEM FEATURES (CORNER APPLICATION)

- 1. Surface Mount G.I Flange
- 2. Fire Blanket
- 3. Flat Head Concrete Screw
- 4. Concrete Slab (by others)



- 1. Recess Mount G.I Flange
- 2. Fire Blanket
- 3. Flat Head Concrete Screw
- 4. Concrete Slab (by others)





Application	JO	SH	SW	± Mov	rement (%)		Load(T)
		Millimete	r	Horizontal	Vertical	Shear	Load(T)
	25	*	*	50	50	50	*
	50	*	*	50	50	50	*
	75	*	*	50	50	50	*
	100	*	*	50	50	50	*
Straight &	125	*	*	50	50	50	*
Corner	150	*	*	50	50	50	*
	200	*	*	50	50	50	*
	250	*	*	50	50	50	*
	300	*	*	50	50	50	*
	350	*	*	50	50	50	*
	400	*	*	50	50	50	*
	450	*	*	50	50	50	*
	500	*	*	50	50	50	*

JO = Joint Opening

SH = System Height

SW = Sight Width



FIRE RATED EXPANSION JOINT (THERMAL & SEISMIC MOVEMENTS)



This Series Fire Barrier range is made of compressible, non-combustible mineral fibers over bound with glass fiber yarn. It is supplied as a highly flexible, moisture and fungus resistant, cylindrical joint filler. Fire Barrier guarantees an efficient protection against fire and hot gases for up to 4 hours. The system is extremely easy to install by hand and is available in a range of diameters from 40mm to 170mm. It can be used independently or in combination with silicon or polyurethane sealant, expansion or compression joint seals, clip fixed joint covers or any other mechanical protection or waterproofing system. We recommend this Series for applications such as structural movement joints in floors, walls and ceilings, precast panels joints, protection between horizontal concrete slabs and curtain walls, head of walls, etc... Our Fire Barrier efficiently protects Hospitals, Schools, Airport Terminals, Malls and Shopping Centers, Rail Terminals, Hotels, Car Parks, Stadiums, and many other Public Buildings.

Characteristics:

Manufactured from mineral fibers.

Service temperature: <7,800 deg C (DIN 52271). Melting temperature: 12,000 deg C (DIN 4102 / T17). Unaffected by water and humidity (DIN 52615).

Highly flexible and easy to install.

Resistant to micro-organisms, moisture and fungus.



Resistant to wide range of aggressive agents except hydrochloric acid and concentrated alkalis. Free of asbestos and ceramics.

Our Fire barrier complies with the European guideline 97/69/CE & is not hazardous for human health

SYSTEM DETAIL TABLE 17

Application	JO	SH	SW	± Mov		Load (T)	
Application	Millimeter			Horizontal	Vertical	Shear	
	25		*	50	50	Excellent	*
Straight /	51	*	*	50	50	Excellent	*
Corner	76	*	*	50	50	Excellent	*
	102	*	*	50	50	Excellent	*
	127	*	*	50	50	Excellent	*

JO = Joint Opening

SH = System Height

SW = Sight Width



CABLE MANAGEMENT **SYSTEM**



Cable Tray



Cable Ladder



Cable Trunk



Unistrut Support System



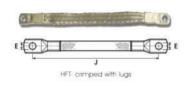
Base Plate



Basket Tray & Accessories



C-ChannelB2B



HFT-Crimpled with Lugs



EMT Conduits



PVC Pipe



Electrical Boxes



Control Panel Boxes

ARCHITECTURAL **ENGINEERING SOLUTIONS**



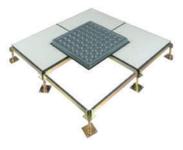
Roof Hatch



Handrail



Garbage & Linen Chute



Access Raised Floor



Lockers



Ladders



Gratings (Steel / Galvanized)



Steel Bollards



Fence



Metal Gates



Entrance Mats



Cubicle Toilet Partitions

ARCHITECTURAL ENGINEERING SOLUTIONS



Expansion Joint System



Tile & Carpet Trim



Stair Nosing



Corner Guard (Impact Protection)



Wall Guard (Impact Protection)



Rubber Corner Guard (Impact Protection)



Rubber Wall Guard (Impact Protection)



D Fender



Speed Humps



Rubber Wheel Stopper



Movement Joint Cover

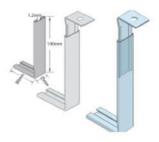
BLOCK WORK & PLASTERING



Steel Lintel



Block Reinforcement (Ladder Type & Truss Type)



Adjustable Head Restraint IAHR)



Hy-Rib Lath



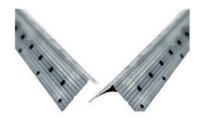
Control Joint



Corrugated Strip & Corrugated Angle



Coil Lath



Corner Bead



Architrave Bead



Corner Mesh



Expanded Metal Lath



Plaster Stop Bead

CONCRETE FORM WORK ACCESSORIES



Plywood



Timber



Binding Wire



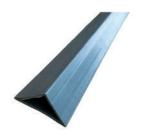
Tie Rods & Accessories



PVC Pipes



PVC Cone



PVC Chamfer



Rapid Clamp



Shuttering Clamp



Concrete Spacer



Plastic Spacer



Steel Wire Mesh

WATER PROOFING & THERMAL INSULATION



Bitumen Membrane



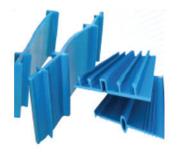
Rock Wool



Geotextile



Extruded Polystrene



PVC Water Stop



Protection Board - Filler Board



Liquid Membrane



Expanded Polystyrene



Foam Backing Rods





Cork Sheet



Aluminum Flashing

PIPE CLAMP, HANGERS FIXING LETTERING



Pipe Clamp with Rubber



Long Nut Pipe Clamp



Clevis Pipe Hanger



Adjustable Band Hanger



Channel Clamp



U Clamp



Pipe Clamp I Snap)



Beam Clamp



Conduit Clamp I Omega)



Anchor J Bolt



Threaded Rods



Steel U-Bolt

GYPSUM PARTITIONS SUSPENDED CEILING



Gypsum Board



Access Panel



Studs & Runners



Ceiling Furring Channel & Channel Bracket



Perimeter Angle & Dry Wall Angle



Furring Channel



Adjustable Rod Hanger



Dry Wall & Self Drilling
Screws



C - Bracket



Joint Mesh



Wire Connecting Clip



Gypsum Putty

CLADDING ACCESSORIES



Z-Bracket with returned Leg Horizontal Joint



Returned Leg Bracket



Up & Down Bracket



L - Bracket



Unistrut Support System



Tam Anchor Bolt



Through Bolt



Sleeve Anchor Flange Nut Type



Hex Bolt with Nut Washer & S rin Nut

TOOLS & CONSUMABLE ITEMS



PPE Personal Protective Equipment



Hand Tools



Spring Nut / Washer & Drop in Anchor



Common Nails



Concrete Nails



Nylon Anchor Plugs



Hammer Drilling



Burlap



Silicon & Sealant



Jig Saw Machine



Abrasive & Diamond Blades



Cordless Drill Machine

QUALITY POLICY



NMTC provides quality management, co-ordination, production and processing, manufacture and installation services throughout KSA and sometimes abroad. The NMTC has developed its expertise since its establishment and its aim is to achieve a high standard of construction and service to its customers.

It is the policy of NMTC to provide the customer with goods ond services to the agreed requirement accordance with the details and price. The Directors, Management and Staff are responsible for Quality Control through the Quality Management System seeking improvement by constant review, with suppliers and sub-contractors being encouraged to co-operate. The NMTC is committed to achieving customer satisfaction by the use of quality procedures which will be operated to meet or exceed the requirements of ISO 9001-2015.







شركة نبراس المعدن للصناعة NIPRAS METAL INDUSTRY Co.









+966568805050



info@nipras.sa



www.nipras.sa