

ADVANCE POLYMER J.T.

G O F O R W A R D T O W I N



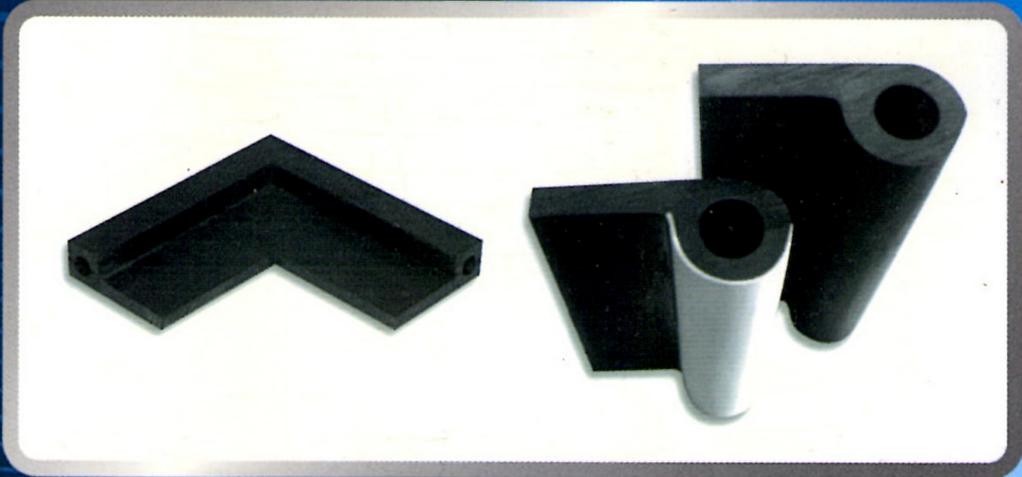
**RUBBER
GASKETS**



**RUBBER
WATERSTOPS**



**RUBBER
FENDERS**



J-SEALS



CUSTOM MOLDS

**RUBBER
DAM**



Advance Polymer J.T. Co., Ltd.

Go Forward to Win



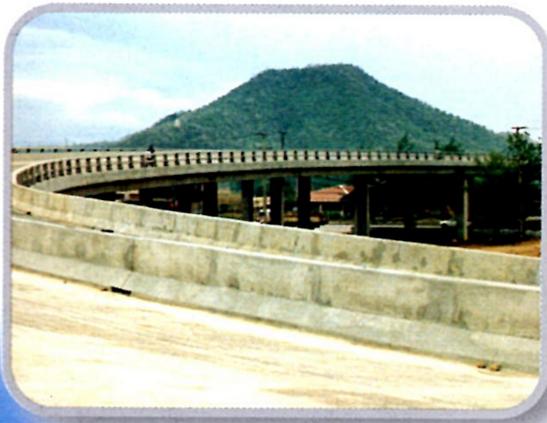
ISO CERTIFICATE



THAI INDUSTRIAL STANDARD CERTIFICATE

Advance Polymer is a company that has been manufacturing custom molded and extruded rubber products in Thailand since 1973. Advance Polymer offers a complete line of pipe gaskets for concrete pipe, plastic pipe, and cast iron pipe products in sizes from 2 “(50 mm) to 144” (3600 mm.).

In addition, we are capable of producing bridge compression seals which has been served for many construction projects. A wide range of rubber compounds are available, including: NR, CR, EPDM, NBR, SBR etc.



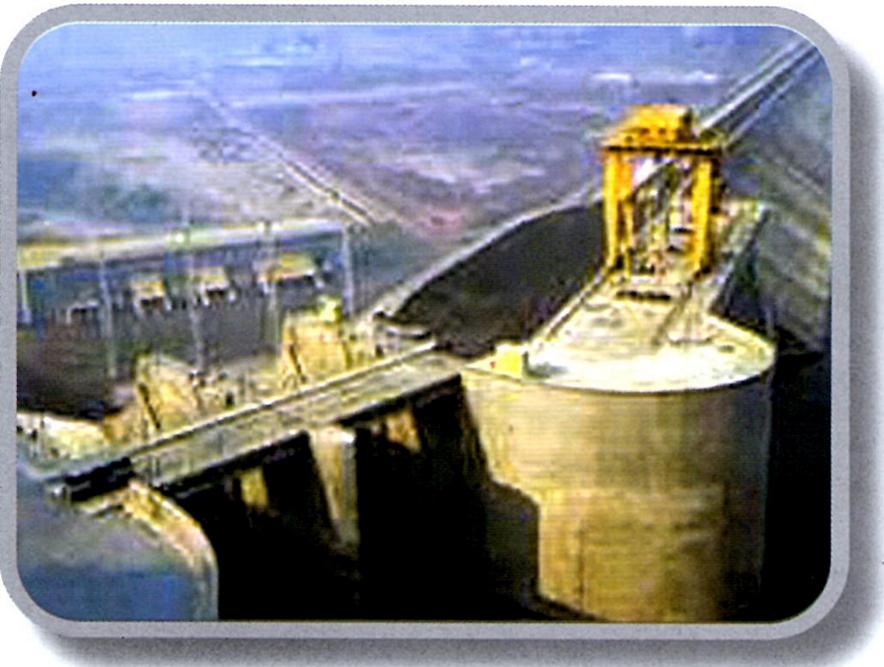
Khlong Tha Dan Dam, Nakornnayok
with 5,000 lm of Advance Polymer's Rubber Waterstop Size 14” (3 bulbs) and 5,000 lm 9” (2 bulbs).

OUR EXPERIENCE IN RUBBER GASKET AND SEAL PRODUCTS



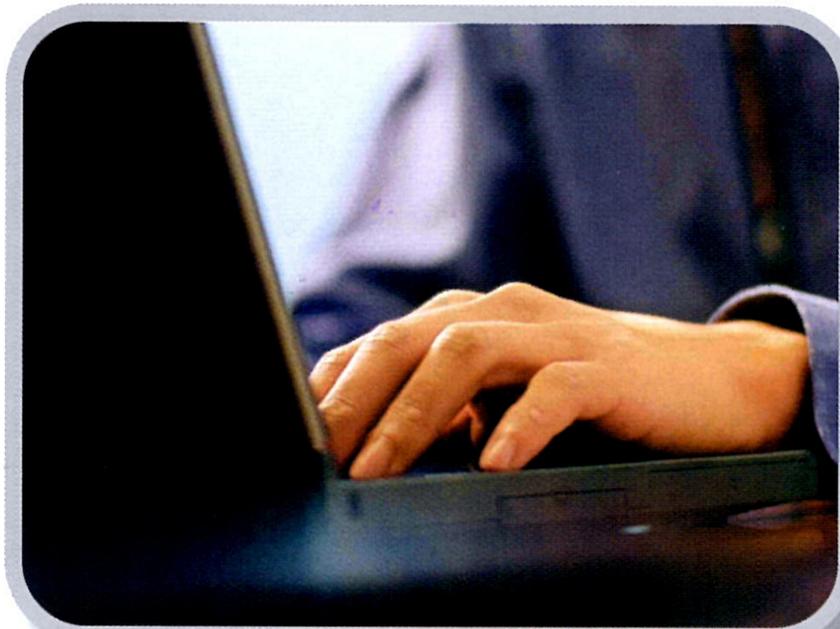
* Advance Polymer is currently the main supplier of **Thai Pipe Industry Co., Ltd.**, a leader in PVC pipe manufacturer and related products in Thailand.

* Main rubber gasket supplier of **Samutprakarn Wastewater Management Project**, so far the largest jacking pipe project in Thailand with the complete range of jacking pipes from 600 - 3000 mm.



* Advance Polymer supplied all Rubber Waterstops used in

- **Khao Laem Dam Project, Kanchanaburi.**
- **Pak Mun Dam Project, Ubon Ratchathani.**
- **Khlong Tha Dan Dam Project, Nakornnayok.**
- **Pak Pha Nang Dam Project, Nakorn Sri Thammarat.**



Engineering Services

Advance Polymer offers a total design program including materials selection, tooling design, manufacturing set-up, fabrication, quality control and testing. Our emphasis on maintaining a close working relationship with every customer, coupled with technical expertise of our engineers and chemists, ensures that Advance Polymer products are second to none.



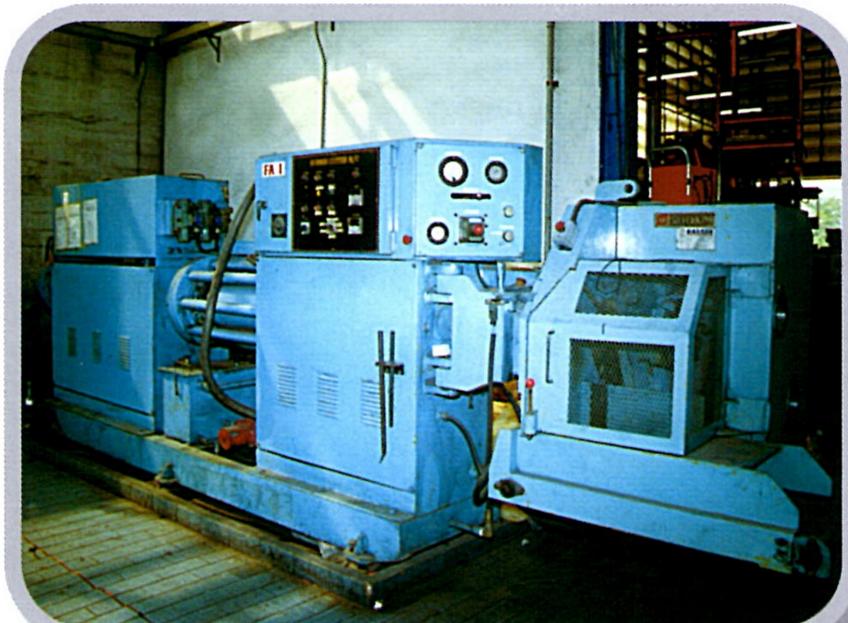
Custom Designs

If your job specifications require a special configuration, or a specific material, Advance Polymer is always ready to help you in designing a special product for virtually any gasketing or sealing application.



Customer Service

To some suppliers, the sales process may end with the product's delivery, but for Advance Polymer, it is only the first part of our commitment to our customer. Advance Polymer's special emphasis is, and always has been, to work with our customers in solving application challenges through engineering, design, quality control, service and support to assure total satisfaction.



Rubber Compounds

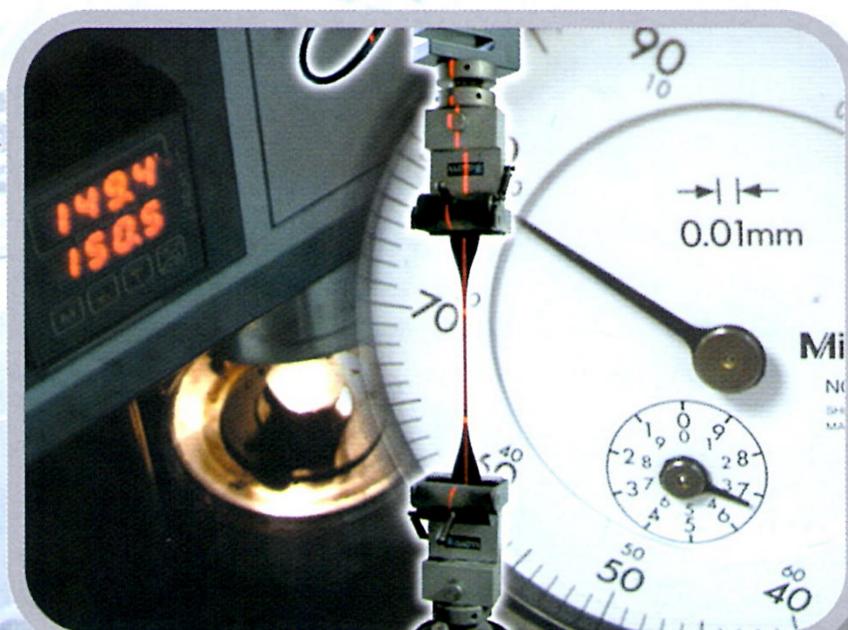
Working with our customers, can formulate custom rubber compounds to meet the physical properties they require. Our application specialists have extensive experience with a wide variety of elastomers, including:

- **Natural Rubber (NR)**
- **Styrene Butadiene Rubber (SBR)**
- **EPDM**
- **Polychloroprene (CR)**
- **Nitrile**



Quality Control

Continual product testing is a key part of Advance Polymer's in-plant quality assurance program. Our quality control engineers continually monitor the manufacturing process, make inspections along the production line and oversee each job through to completion. Advance Polymer is dedicated to comprehensive program of development, engineering and testing.



Testings

Advance Polymer's testing facilities are equipped to assist our engineers in performing a variety of tests, ranging from rubber hardness to tensile strength and elongation. This includes a well-equipped rubber laboratory where materials and manufacturing processes are tested in a controlled environment.

Routine testing is performed to assure compliance with a number of international standards: such as ASTM, ASSHTO, BS, ISO etc.

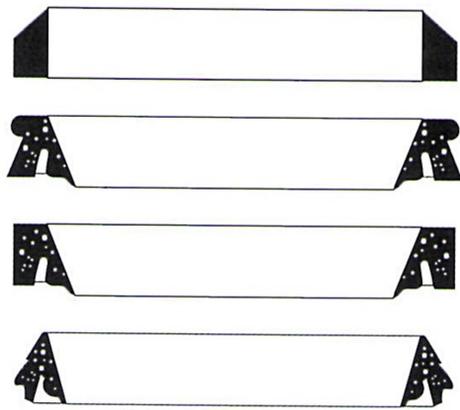
RUBBER SEAL AND GASKET



Advance Polymer's Seal and Gasket are applicable in various fields of industry including public water, sewage, chemical, water treatment system etc.

Raw Material either Natural Rubber (NR) or any Synthetic Rubber are available to meet your requirements.

PVC Pipe Seal (Gasket)

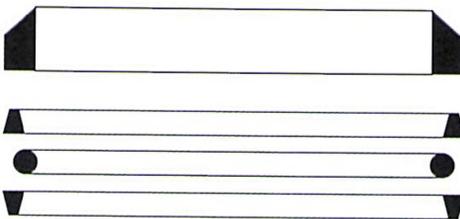


Standard Size

Size (mm.)	100	150	200	150	300	400	500	600
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* ASTM F-477 or TIS No. 17

AC Pipe Seal (Gasket)

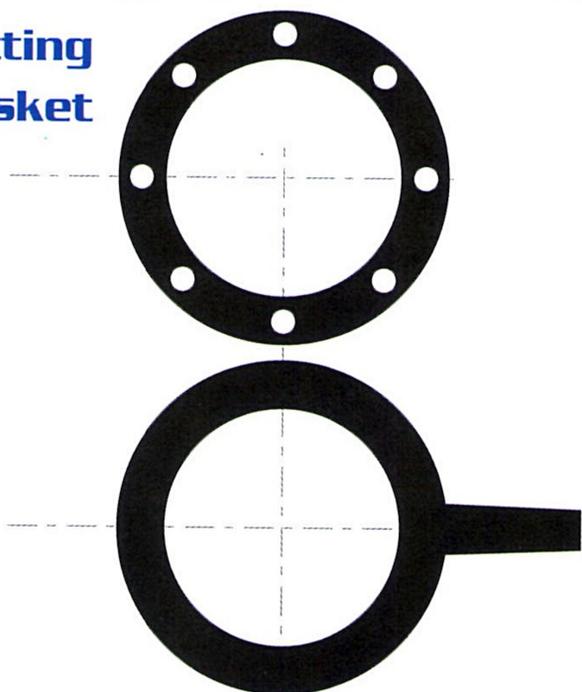


Standard Size

Size (mm.)	100	150	200	150	300	400	500	600
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* ASTM D 1869-66 or TIS No. 237 - 2520

Pipe Fitting Gasket



Standard Size

Size (mm.)	100	150	200	150	300	400	500	600
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* BS 2494



Custom designs are also accepted.

Advance Polymer offers wide range of rubber compounds to meet required physical properties with a complete range of rubber gasket from 50-3600 mm. Wide variety of elastomers including :

- **Natural Rubber (NR)**
- **Polychloroprene (CR)**
- **Styrene Butadiene Rubber (SBR)**
- **EPDM**
- **Nitrile**
- **etc.**

STANDARD SPECIFICATION OF RUBBER SEAL FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE

PROPERTY	STANDARD	REQUIREMENT
Tensile strength, Min.	8 MPa	8 MPa
Elongation at break, Min. %	350	350
Shore durometer Hardness Min. Max.	35 ^A 65 ^A	35 ^A 65 ^A
Compression set, Max., % of original deflection (22 h at 70 °C)	25	25
Accelerated aging (96 h at 70 °C) - % Decrease in tensile strength - % Decrease in elongation	15 (Max.) 20 (Max.)	20 (Max.) 40 (Max.)
Liquid immersion (Max. % volume change) Oil (70 h. at 100 °C) Water (48 h at 70 °C)	10	50 15
Ozone resistance (12 h. 50 p phm ozone at 40 °C)	no cracks in accordance with test method D 1149	no visual crack
ASTM C 443 M-8 Standard Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gasket		

SPECIFICATION OF RUBBER SEALS

PVC PIPE (ASTM F-477)

PHYSICAL PROPERTY	REQUIREMENT
Hardness	40-60 Shore A Durometer
Tensile Strength (Min.)	13.8 Mpa, 13.8 N/mm ²
	140 Kg/cm ²
Elongation at break (Min.)	400 %
Compression Set at 70 °C, 22 hrs. (Max.)	20 %
Aging at 70 °C, 96 hrs. (4 Days)	
- Change in Hardness (Max.)	+ 8 point
- Change in Tensile Strength (Max.)	- 15 %
- Change in Elongation at break (Max.)	- 20 %

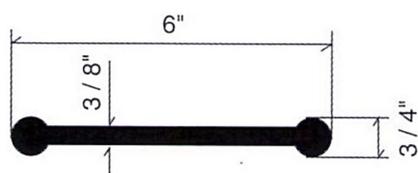
PVC PIPE (ASTM D 1869-66)

PHYSICAL PROPERTY	REQUIREMENT
Hardness	O-Type: 50-60 Shore A Durometer T-Type: 55-65 Shore A Durometer
Tensile Strength (Min.)	14 Mpa, 14 N/mm ²
	143 Kg/cm ²
Elongation at break (Min.)	350 %
Compression Set at 70 °C, 22 hrs. (Max.)	16 %
Aging at 70 °C, 96 hrs. (7 Days)	
- Change in Hardness (Max.)	+ 7 point
- Change in Tensile Strength (Max.)	- 15 %
- Change in Elongation at break (Max.)	- 25 %



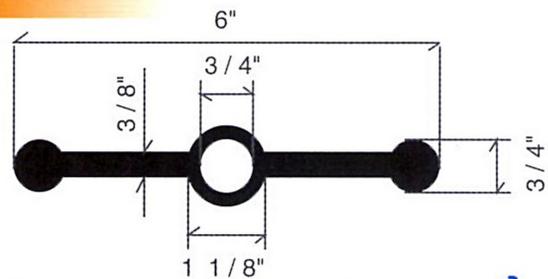
RUBBER WATERSTOPS

AV 3456



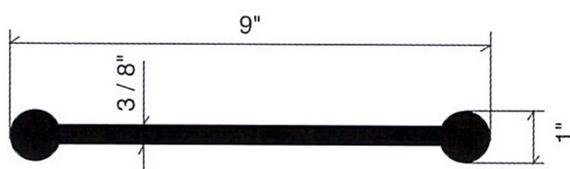
(Irrigation Dept., Type C)

AV 4566

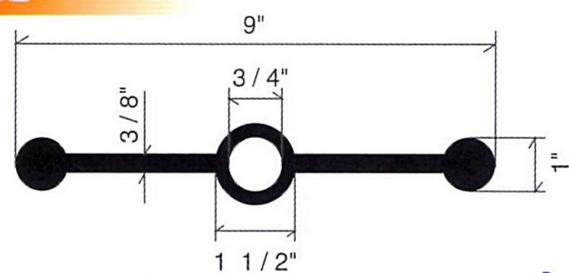


(Irrigation Dept., Type B)

AV 3459



AV 4566

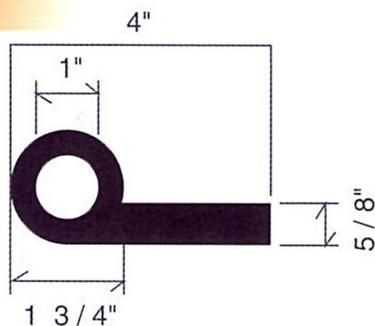


(Irrigation Dept., Type A)

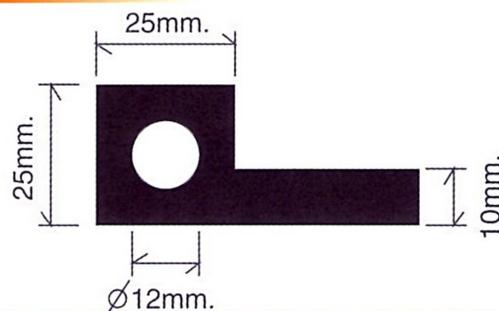
(Compound base on Natural Rubber (NR), Neoprene, SBR, etc.)

J-SEALS

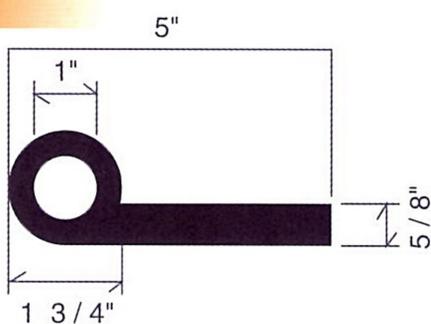
AV 5674



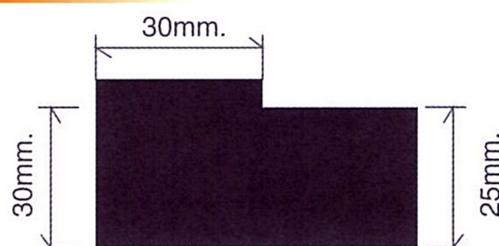
AV 6051



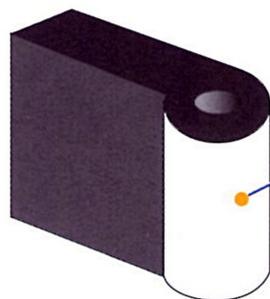
AV 4569



AV 6061



SPECIAL DESIGN WITH PTFE



Coated with
Fluorocarbon
or PTFE

PHYSICAL PROPERTIES (ASTM D2240)

PHYSICAL PROPERTY	STANDARD	REQUIREMENT
HARDNESS (Durometer type A)	ASTM D2240	60 - 70
Tensile strength	ASTM D412	2500 PSI (Min.)
Elongation at break	ASTM D412	450% (Min.)
Water absorption (% wt. change) 7 days at 75 °F	ASTM D471	5% (Max.)
Compression set (22 hrs at 158 °F)	ASTM D395 method B	25% (Max.)
AFTER ACCELERATED AGING IN AN AIR OVEN, 70 HRS. AT 158 °F	ASTM D573	
- Change in tensile strength		25% (Max.)
- Change in elongation at break		25% (Max.)
OZONE RESISTANCE	ASTM D1140	no crack
25 pphm ozone in air by volume.		
20% strain 100 °F ± 2 °F 48 hrs.		

We are able to manufacture special size or non standard dimensions according to your specifications.

CUSTOM MOLDS

We also manufacture all rubber parts as your requirements.



Pump and Motor Parts



Electric Pump Parts



Sanitary Parts



Rubber Bottle Cap



Woven Machine Parts



Car Bumper Parts



Car Bumper Wheel



Transformer Parts



Car Bumper Hand



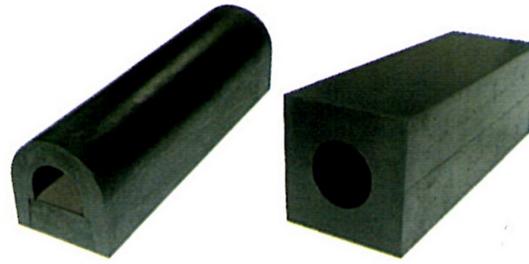
Scooter Parts



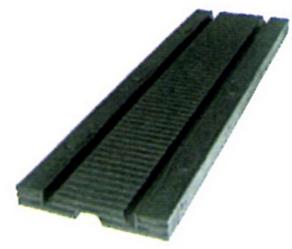
Slide Spring for Modular Expansion Joint



Dowel Cap



Rubber Fender



Elastomeric Expansion Joint



**Pak Mun Dam,
Ubon Ratchathani**
with 1,300 lm of Advance Polymer's
Rubber Waterstop Size 9" (2 bulbs).

PERFORMANCE RECORDS

RUBBER Waterstops

Macro Projects

- Khao Laem Dam
 - Kanchanaburi Province**
 - Italian-Thai Development (Public) Co., Ltd.
 - Bangkok**
 - Italian - Thai Development (Public) Co., Ltd. in JV with Maeda
 - U Thai-Thani Province**
 - Bangkok Motor Equipment Co., Ltd.
 - Cholburi Province**
 - Metropolitan Water Works Authority of Thailand
 - Bes-Thai Engineering Co., Ltd.
 - Chiengmai Province**
 - China State
 - Construction and Engineering Co., Ltd. Bangkok Office
 - Udol Rajthani Province**
 - Joint Venture Vianini Lavori
 - Viannini Thai (Quantity 15,000 LM.)
 - Nakorn Srithammaraj Province**
 - Sri Saeng Karn Yotha in JV with
 - China Hydra Electric Engineering and Construction
 - Nakorn Nayok Province**
 - Vichitphan Construction Co., Ltd.
 - Krung Thai Engineering Co., Ltd.,
 - China National Water Resources and Hydropower Engineering Corporate and China Electric Power Technology Import and Export Corporation
- Don Muang Airport Extension (Phase I)
- Tap Sa Lao Dam
- Water Treatment Plant
- Mae Kuang Dam
- Parkmoon Dam
- Parkpanang Dam
- Khlong Tha Dan Dam

Medium - Size Projects

- Hydro power plant Huay Mae Sod
 - Tak Province**
 - Chiengmai Construction Co., Ltd.
- Hydro power plant Song Pee Nong
 - Kanchanaburi Province**
 - TU Construction Ltd.
- Hydro power plant Unit II
 - Kanchanaburi Province (Song Pee Nong)**
 - Prasit Suphan Co., Ltd.
- Nam Mann Dam
 - Loei Province**
 - Civil Engineering Co., Ltd.
- Huay Yang Dam
 - Prachinburi Province**
 - Vichitphan Construction Co., Ltd.
- Hydro power plant Ban Tham Nop
 - Surin Province**
 - Chalermchai Service Sakol Nakorn Co., Ltd.
- Hydro power plant - Nan Hang
 - Nan Province**
 - Suwalee Ltd.
- Khlong Yang Irrigation System
 - Nakorn Nayok Province**
 - Wisitchai Ltd.
- Nam Prom Irrigations System
 - Chaigaphum Province**
 - Heng Tes Hay Ltd.
- Lam Nang Rong Irrigation Systems
 - Buriram Province**
 - Sam Prasit Ltd.
- Lam Chang Han Irrigation System
 - Buriram Province**
 - Sange Engineering Ltd.
- Huay Sa Bak Irrigation System
 - Yasothon Province**
 - Wuthipol Ltd.
- Huay Wang Lin Far Irrigation System
 - Kalasin Province**
 - Wisitthai Ltd.
- Lam Pang Irrigation System
 - Kalasin Province**
 - Sirimahachai Ltd.

J-Seals

- Mahasawat Water Treatment Plant
 - JV Aqua - Thai - Italian Thai Development (Public) Co., Ltd.
- Petchkasem Water Distribution Plant
 - Colon - Thai Mui
- Bangkaen Water Distribution Plant
 - Sam Prasit Ltd.



**Khao Laem Dam,
Kanchanaburi**
with 1,800 lm of Advance Polymer's
Rubber Waterstop Size 9" (2 bulbs).

G O F O R W A R D T O W I N



 **ADVANCE POLYMER J.T. CO., LTD.**

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