



## DAECHANG CORP.

*SPECIALIZED IN*

BRIDGE BEARINGS  
ANTI-SEISMIC DEVICES  
BASE ISOLATORS  
EXPANSION JOINTS  
NOISE BARRIERS

[WWW.DAECHANGCORP.COM](http://WWW.DAECHANGCORP.COM)

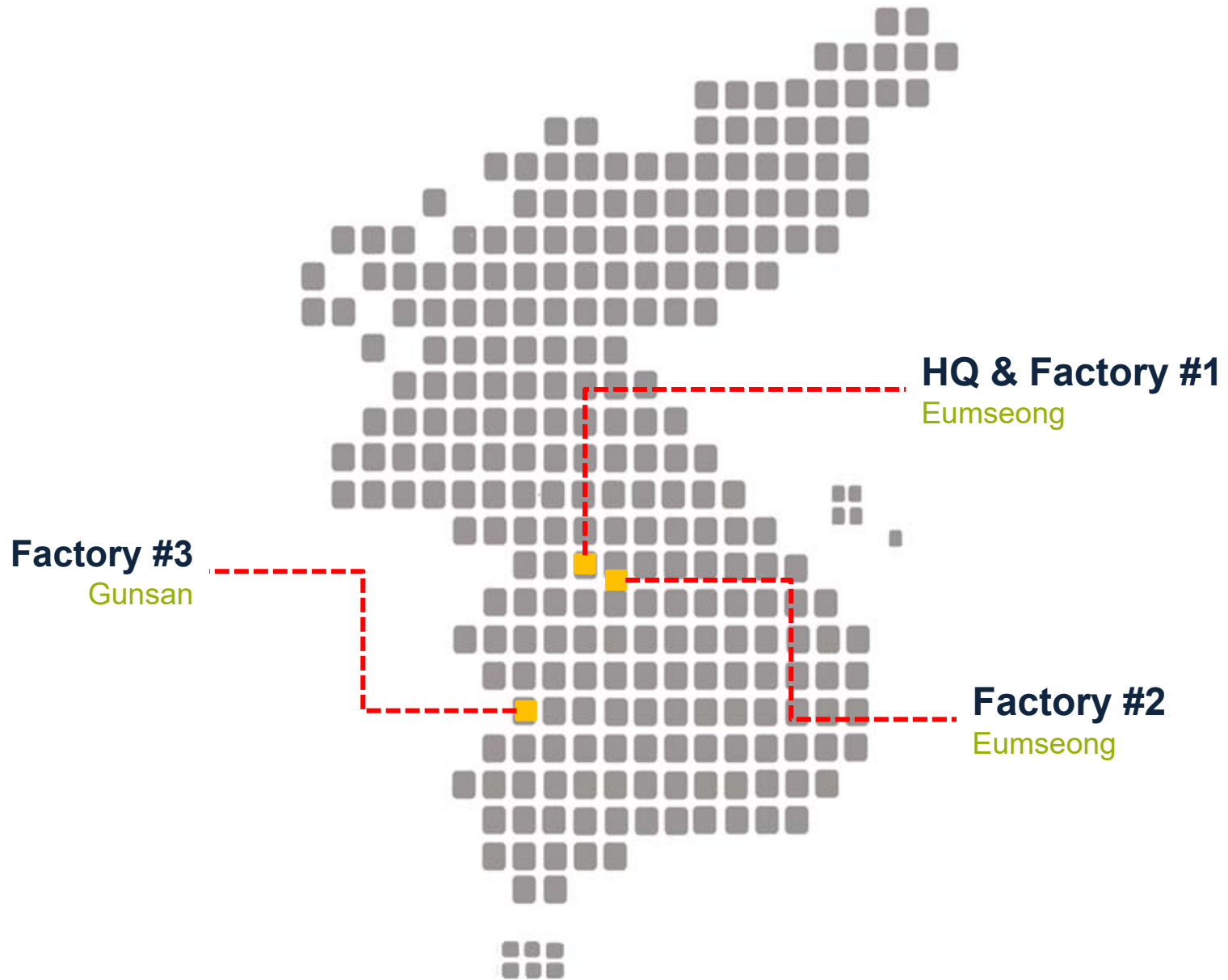
# COMPANY INTRODUCTION



## GENERAL INFORMATION

- **Head Office & Factory #1** : **Eumseong, Korea**
- **Factory #2** : **Eumseong, Korea**
- **Factory #3** : **Gunsan, Korea**
- **Factory #4** : **Bangkok, Thailand**
- **Factory #5** : **Shandong, China**
- **Establishment** : **September 1998**
- **No. of Employee** : **60**
- **Turnover(5yrs avg.)** : **USD 26,000,000**

# HQ & FACTORIES





**HQ & FACTORY #1 IN EUMSEONG**



**FACTORY #2 IN EUMSEONG**



**FACTORY #3 IN GUNSAN**



**FACTORY #4 IN BANGKOK, THAILAND**

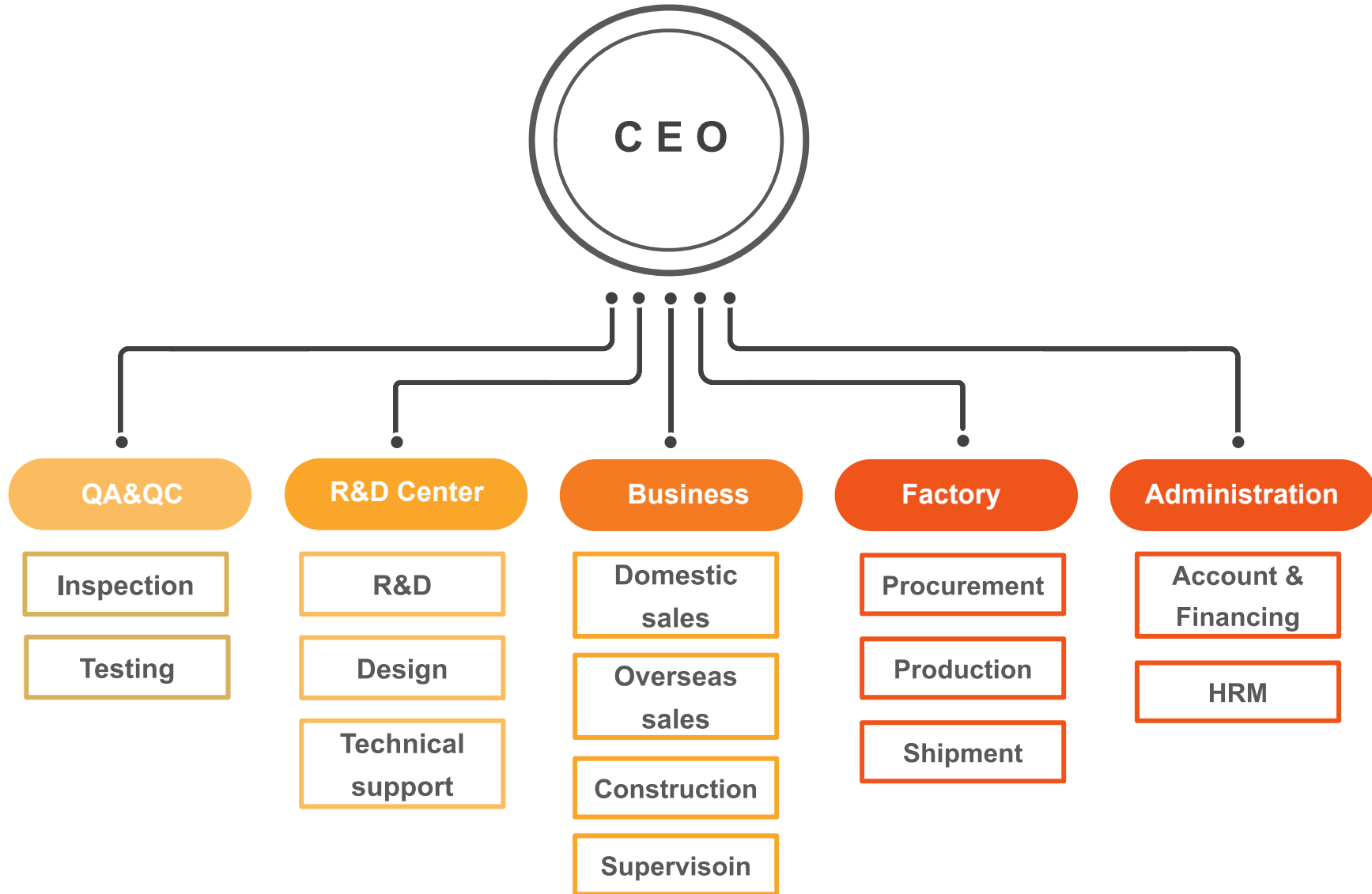


**FACTORY #5 IN SHANDONG, CHINA**

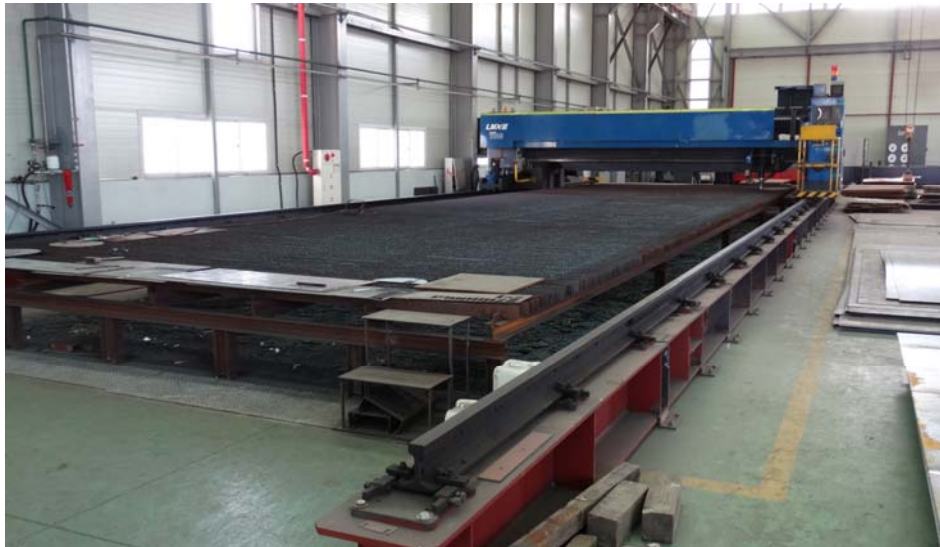
Shandong Longxiang New Material Technology Co., Ltd.



# ORGANIZATION



# FACILITIES



# FACILITIES



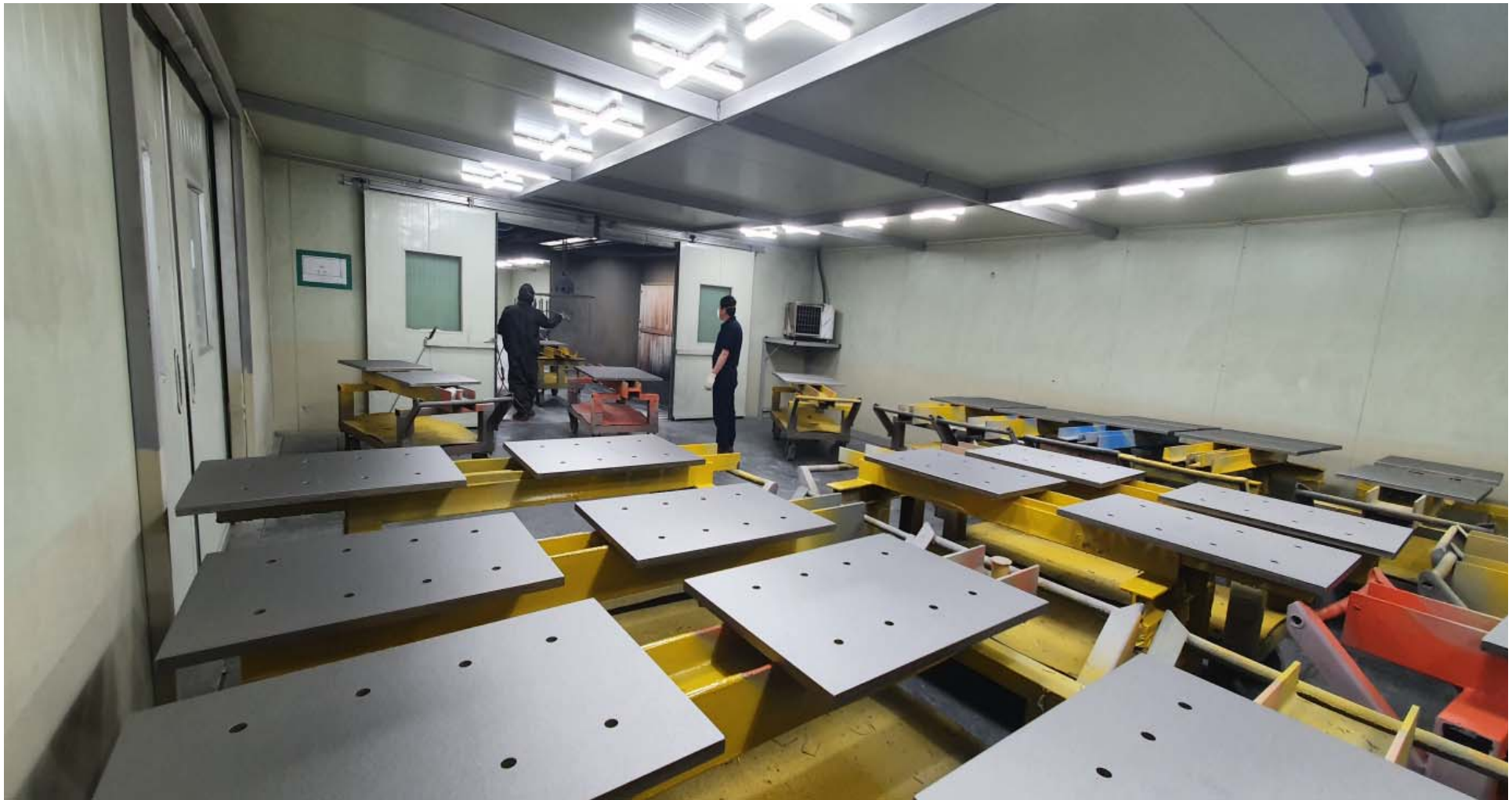
# FACILITIES





# FACILITIES





# FACILITIES



# FACILITIES







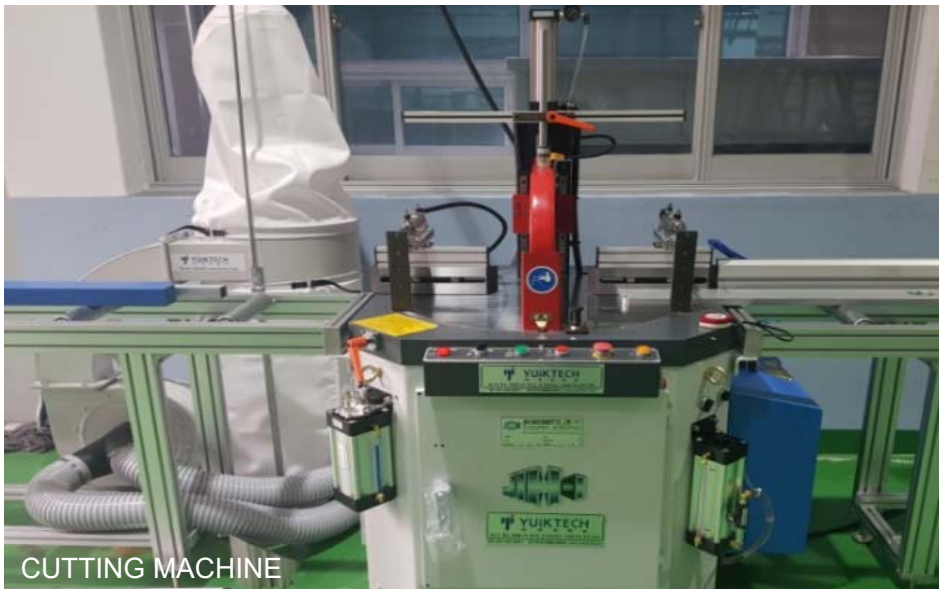
# FACILITIES (NOISE BARRIERS)



BENDING MACHINE



CUTTING MACHINE



CUTTING MACHINE



PRESS MACHINE

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## 30,000KN TESTING EQUIPMENT



Vertical Load      Max. 30,000kN  
Horizontal Load      Max. 10,000kN  
Dynamic Load      Max. 2,000kN  
Velocity      Max. 100mm/sec.

## 3,500kN TESTING EQUIPMENT



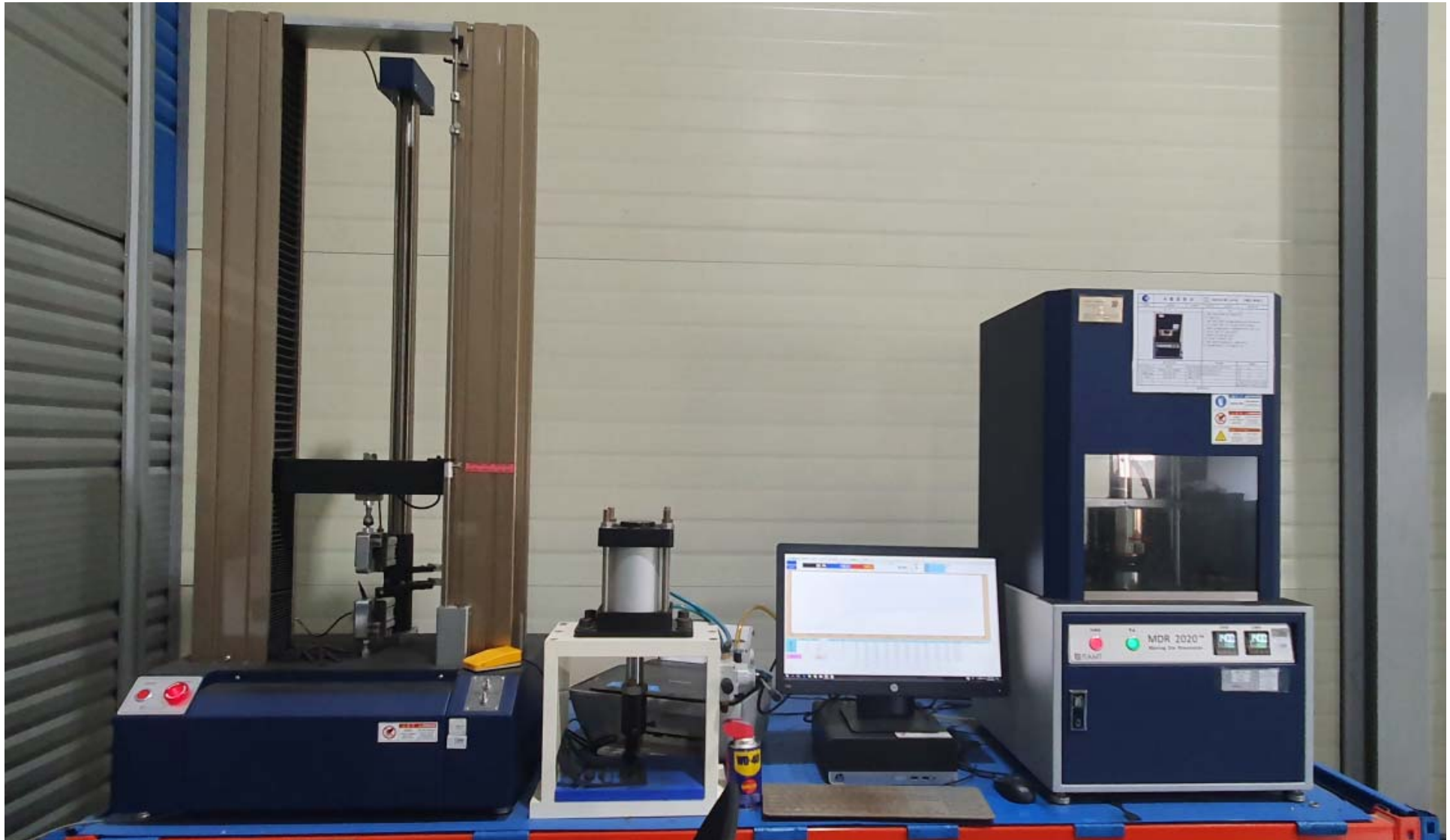
Vertical Load            Max. 3,500kN  
Horizontal Load        Max. 700kN  
Velocity                 Max. 90mm/sec.



## TESTING EQUIPMENT (FOR RUBBER COMPOUND)



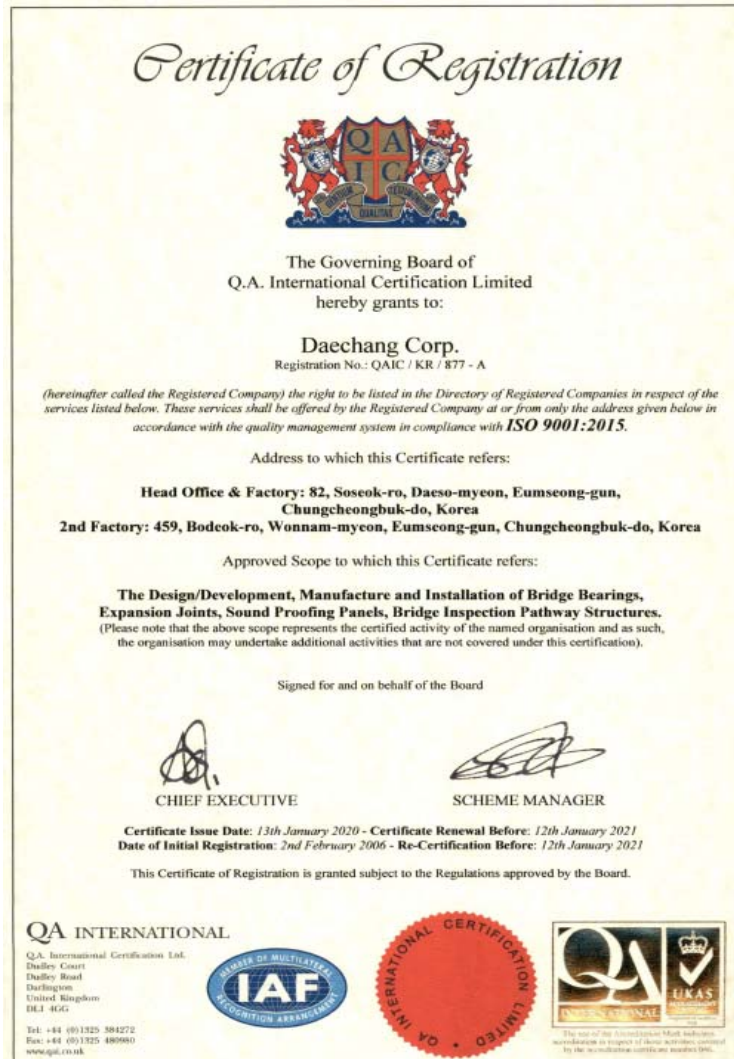
## TESTING EQUIPMENT (FOR RUBBER COMPOUND)



# CERTIFICATES



## ISO 9001



## KS (ELASTOMERIC BEARINGS)





## CE (Elastomeric Bearings)

**ZUS** TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p.  
 Technical and Test Institute for Construction Prague, S0E  
Akreditovaná zkušební laboratoř, Autorizovaná osoba, Notifikovaná osoba, Oznamovaný subjekt, Subjekt pro technické posouzení, Certifikační orgán, Inspekční orgán - Accredited Testing Laboratory, Authorized Body, Notified Body, Technical Assessment Body, Certification Body, Inspection Body - Prosecká 811/76a, 190 00 Praha 9 - Prosek, Czech Republic

**CERTIFICATE  
 OF CONSTANCY OF PERFORMANCE**

No. 1020 – CPR – 090-045983

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:

**STRUCTURAL BEARINGS**  
 variant: **elastomeric bearings**

Type A – laminated bearing fully covered with elastomer comprising only one steel reinforcing plate;  
 Type B – laminated bearing fully covered with elastomer comprising at least two reinforcing plates;  
 Type C – laminated bearing with outer steel plates (profiled or allowing fixing); sheet recessed in the steel; Type F – plain pad bearings and strip bearings

placed on the market under the name or trade mark of  
**DAECHANG CORP**  
 Identification No.: 212-81-40263  
 Address: 82, Soseok-ro, Daeseo-myeon, Eumseong-gun, Chungcheongbuk-do/Republic of Korea


and produced in the manufacturing plant:  
**DAECHANG CORP**  
 Identification No.: 212-81-40263  
 Address: 82, Soseok-ro, Daeseo-myeon, Eumseong-gun, Chungcheongbuk-do/Republic of Korea

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard  
**EN 1337-3:2005**  
 under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the  
**constancy of performance of the construction product.**

This certificate was first issued on 06.11.2019 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

The stamp of the Notified Body 1020  
 Prague, 6 November 2019

  
 Martin Pešek  
 Deputy Manager of the Notified Body



## CE (Lead Rubber Bearings)

**ZUS** TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p.  
 Technical and Test Institute for Construction Prague, S0E  
Akreditovaná zkušební laboratoř, Autorizovaná osoba, Notifikovaná osoba, Oznamovaný subjekt, Subjekt pro technické posouzení, Certifikační orgán, Inspekční orgán - Accredited Testing Laboratory, Authorized Body, Notified Body, Technical Assessment Body, Certification Body, Inspection Body - Prosecká 811/76a, 190 00 Praha 9 - Prosek, Czech Republic

Notified Body 1020

**CERTIFICATE  
 OF CONSTANCY OF PERFORMANCE**

No. 1020 – CPR – 090-046431

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:

**Anti-seismic devices**  
 variant: **Elastomeric isolators**  
 type: **Lead rubber bearing**

placed on the market under the name or trade mark of  
**DAECHANG Corp.**  
 Identification No.: 212-81-40263  
 Address: 82, Soseok-ro, Daeseo-myeon, Eumseong-gun, Chungcheongbuk-do, Republic of Korea

and produced in the manufacturing plant:  
**DAECHANG Corp.**  
 Identification No.: 212-81-40263  
 Address: 82, Soseok-ro, Daeseo-myeon, Eumseong-gun, Chungcheongbuk-do, Republic of Korea

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard  
**EN 15129:2009**  
 under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the  
**constancy of performance of the construction product.**

This certificate was first issued on 18 December 2019 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

The stamp of the Notified Body 1020  
 Prague, 18 December 2019

  
 Martin Pešek  
 Deputy Manager of the Notified Body





## CE (Spherical Bearings)

**ZUS** TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p.  
 Technical and Test Institute for Construction Prague  
Akreditovaná zkušební laboratoř, Autorizovaná osoba, Notifikovaná osoba, Oznamovaný subjekt, Subjekt pro technické posouzení, Certifikační orgán, Inspekční orgán / Accredited Testing Laboratory, Authorized Body, Notified Body, Technical Assessment Body, Certification Body, Inspection Body, Prosecká 811/76a, 190 00 Praha 9 - Prosek, Czech Republic

Notified Body 1020

**CERTIFICATE  
 OF CONSTANCY OF PERFORMANCE**

No. 1020 – CPR – 090-031372

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:

**Product**  
**STRUCTURAL BEARING**  
 variant: **spherical bearing**  
 type: **fixed, guided and free/multi bearing**

produced by or for  
**DAECHANG CORP**  
 Identification No.: 212-81-40263  
 Address: 82, Soseong-ro, Daeso-myeon, Eumseong-gun, Chungcheongbuk-do, Korea

and produced in the manufacturing plant(s):  
**DAECHANG CORP**  
 Identification No.: 212-81-40263  
 Address: 82, Soseong-ro, Daeso-myeon, Eumseong-gun, Chungcheongbuk-do, Korea

This certificate attests that all provisions concerning the assessment and verification of constancy of performance and the performances described in Annex ZA of the standard **EN 1337-7:2004** under system 1 are applied and that the product fulfils all the prescribed requirements set out above.

This certificate was first issued on 7.3.2014 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

The stamp of the Notified Body 1020  
 Prague, 7<sup>th</sup> March 2014

## CE (POT Bearings)

**ZUS** TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p.  
 Technical and Test Institute for Construction Prague  
Akreditovaná zkušební laboratoř, Autorizovaná osoba, Notifikovaná osoba, Oznamovaný subjekt, Subjekt pro technické posouzení, Certifikační orgán, Inspekční orgán / Accredited Testing Laboratory, Authorized Body, Notified Body, Technical Assessment Body, Certification Body, Inspection Body, Prosecká 811/76a, 190 00 Praha 9 - Prosek, Czech Republic

Notified Body 1020

**CERTIFICATE  
 OF CONSTANCY OF PERFORMANCE**

No. 1020 – CPR – 090-031639

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:

**Product**  
**Structural bearings**  
 variant: **pot bearings**  
 type: **fixed, guided and free sliding bearings**

produced by or for  
**DAECHANG CORP**  
 INO: 212-81-40263  
 Address: 82, Soseong-ro, Daeso-myeon, Eumseong-gun, Chungcheongbuk-do, Korea

and produced in the manufacturing plant(s):  
**DAECHANG CORP**  
 INO: 212-81-40263  
 Address: 82, Soseong-ro, Daeso-myeon, Eumseong-gun, Chungcheongbuk-do, Korea

This certificate attests that all provisions concerning the assessment and verification of constancy of performance and the performances described in Annex ZA of the standard **EN 1337-5:2005** under system 1 are applied and that the product fulfils all the prescribed requirements set out above.

This certificate was first issued on 25 April 2014 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

The stamp of the Notified Body 1020  
 Prague, 25 April 2014

# PRODUCT PORTFOLIO



### Pot Bearings



### Spherical Bearings



## Steel Rubber Bearings



## Elastomeric Bearings





### Disc Bearings

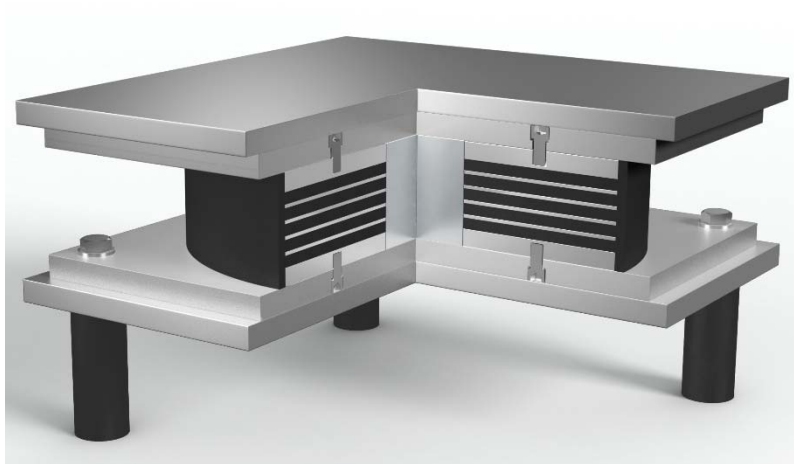


### Sliding Pendulum Isolators

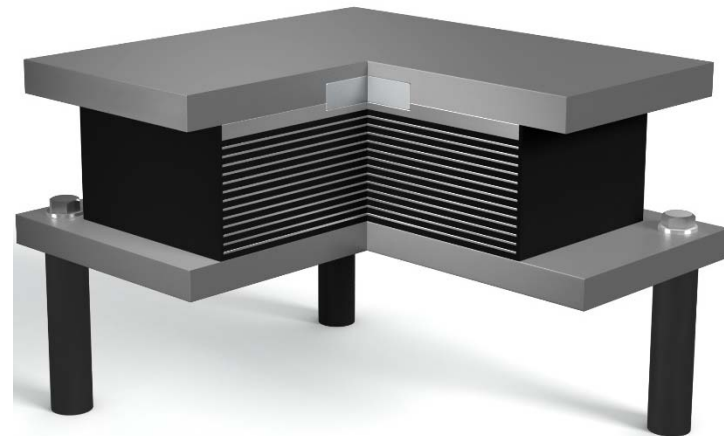




## Lead Rubber Bearings



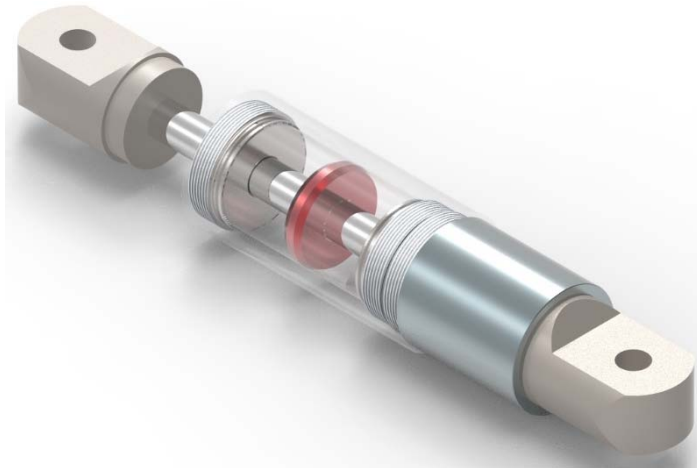
## High Damping Rubber Bearings



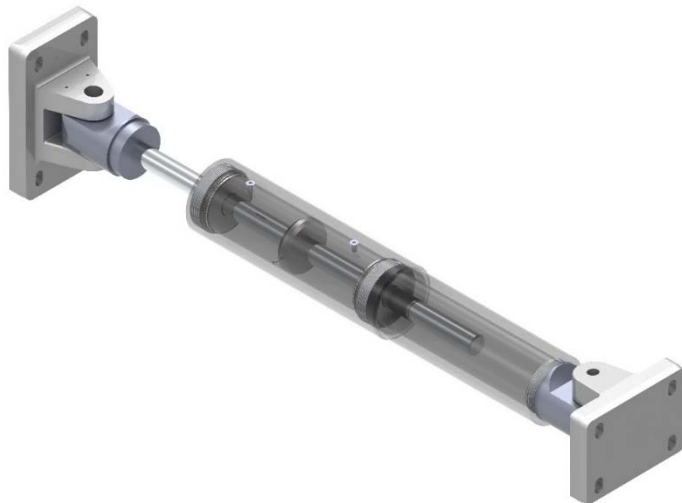
# PRODUCTS



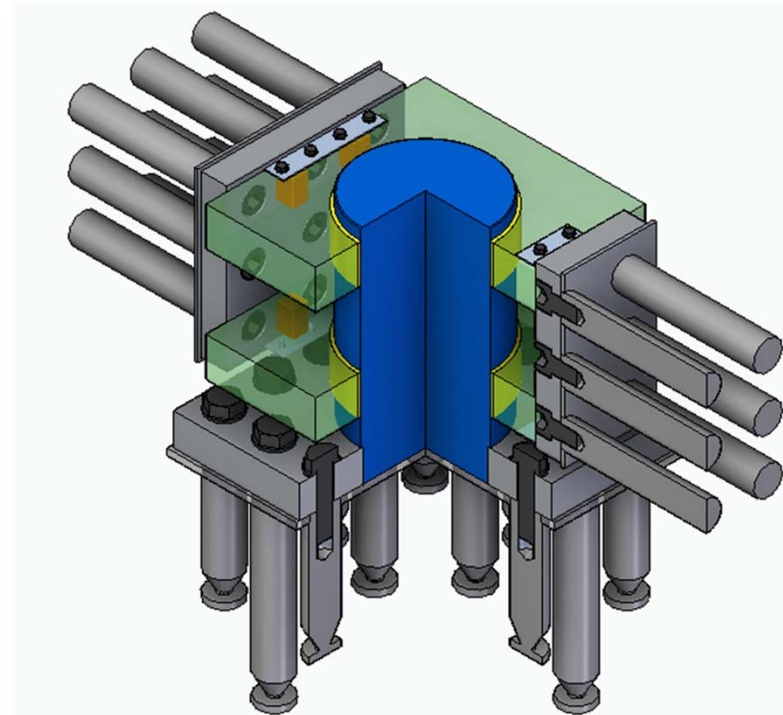
## Lock-Up Devices



## Viscous Dampers

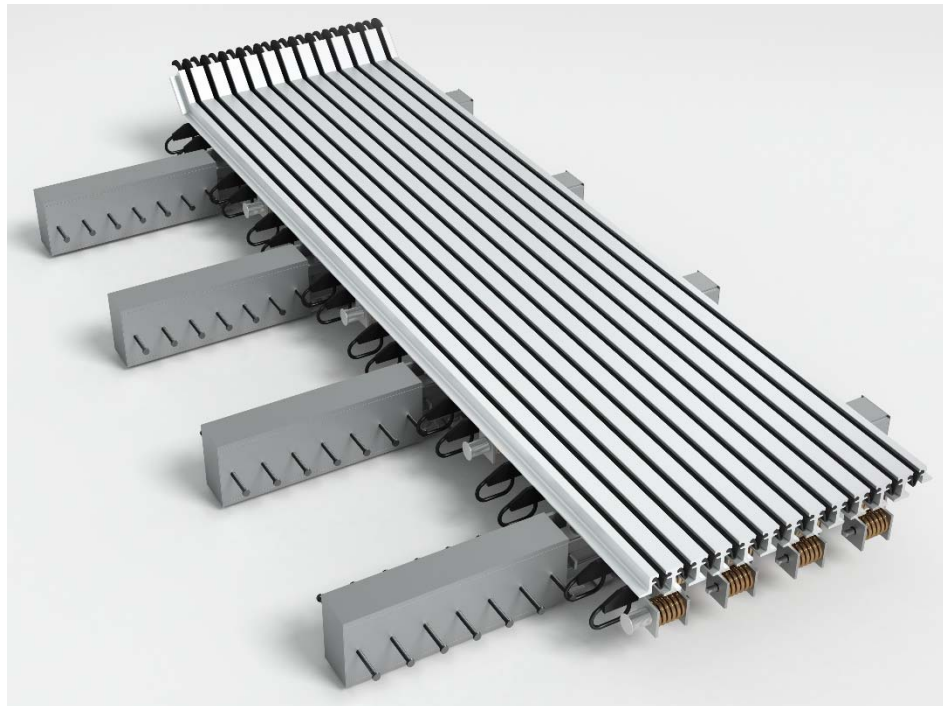


## Shear Key





## Modular Expansion Joints

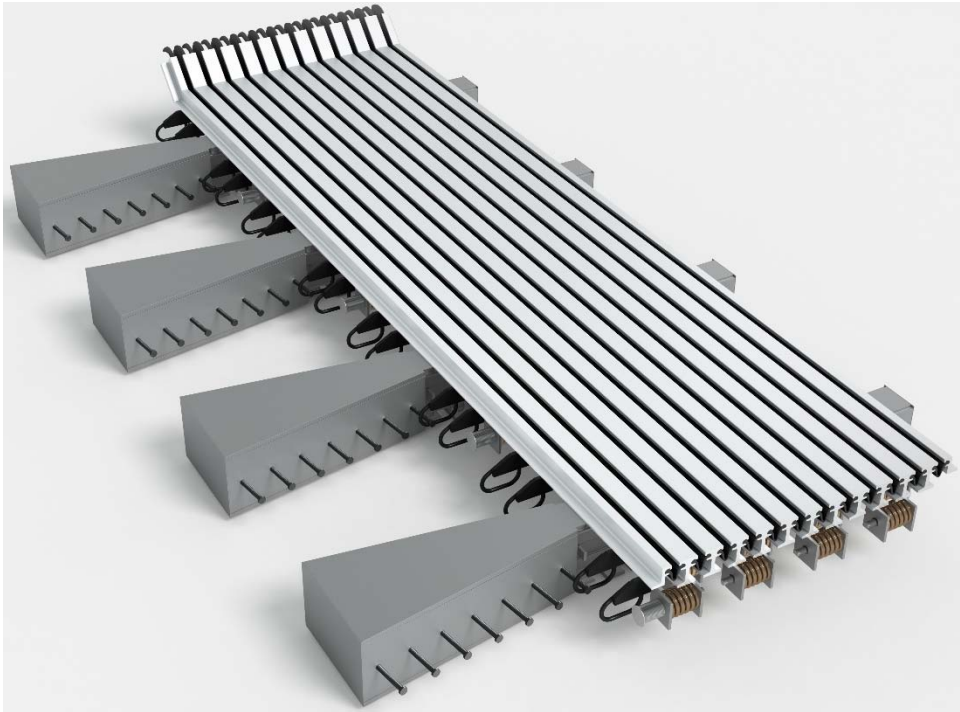


## Finger joints

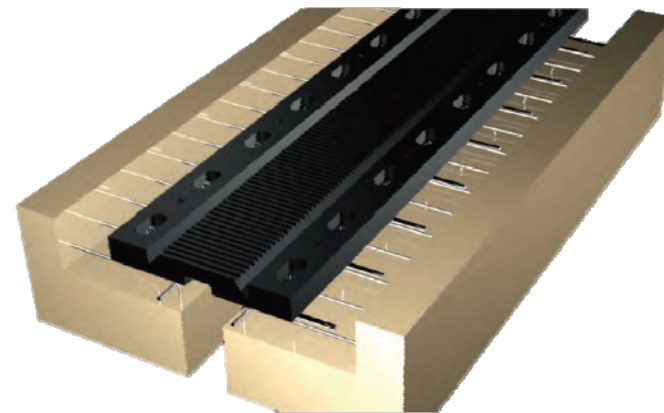
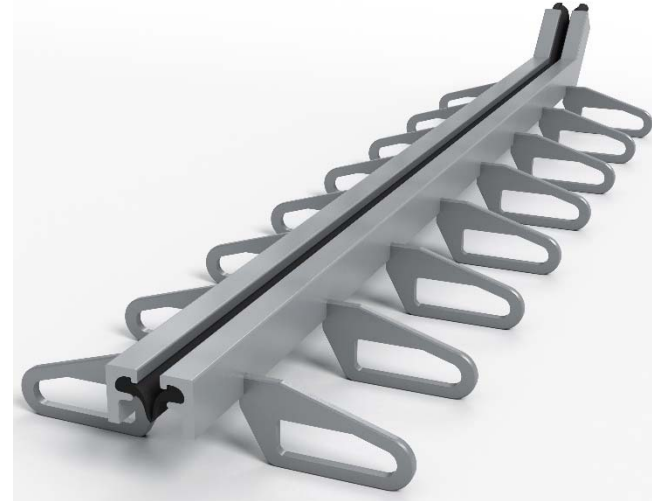




## Swivel Expansion Joints



## Strip Seal Joints



## Transflex Expansion Joints

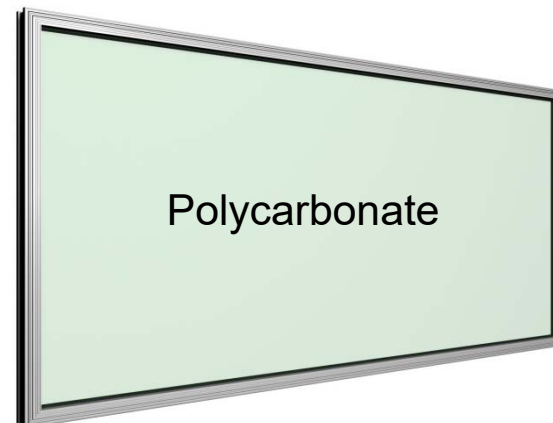
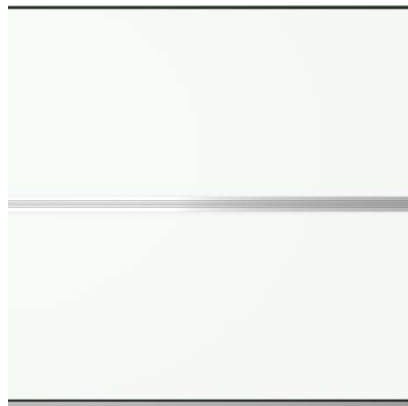
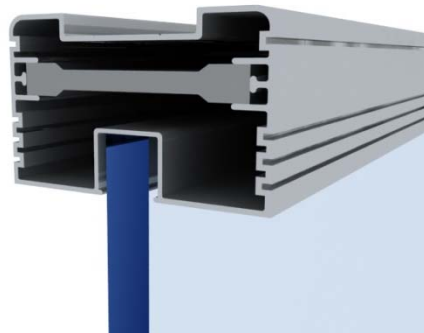
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## PRODUCTS



### TRANSPARENT PANEL - PC (NOISE BARRIERS)

#### PRODUCT SHAPE



- Visual advantages (prevent the accident, view)
- Easy Maintenance.

## PRODUCTS



### INSTALLED PRODUCT ON SITE

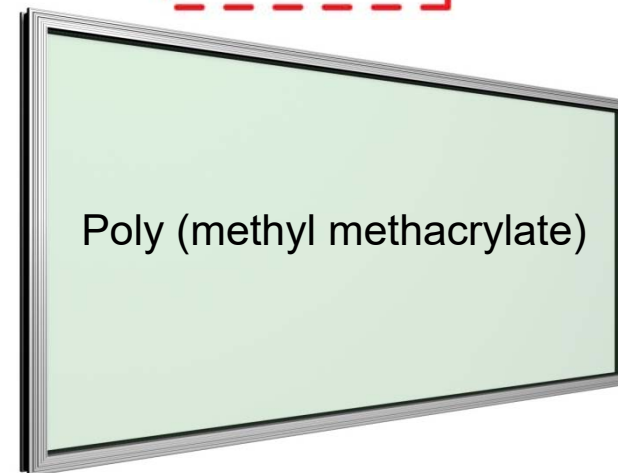
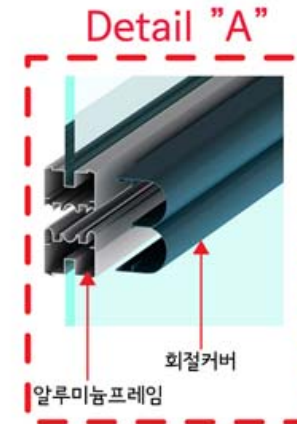
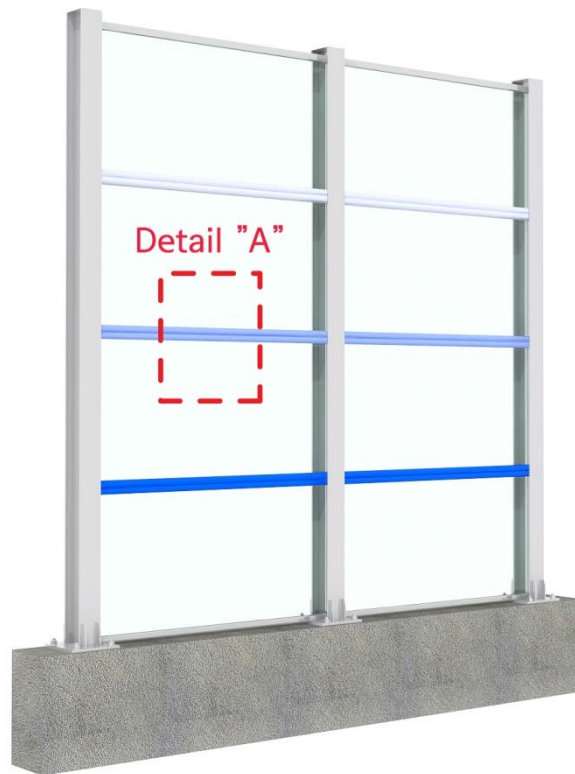


## PRODUCTS



### TRANSPARENT PANEL – PMMA (NOISE BARRIERS)

#### PRODUCT SHAPE



- Visual advantages (prevent the accident, view)
- Easy Maintenance.

# PRODUCTS



## INSTALLED PRODUCT ON SITE

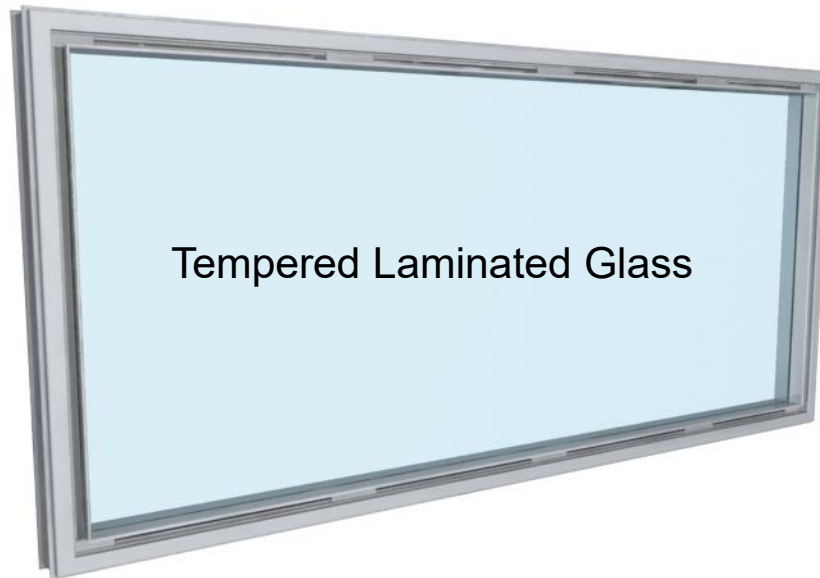


## PRODUCTS



### TRANSPARENT PANEL – TEMPERED LAMINATED GLASS (NOISE BARRIERS)

#### PRODUCT SHAPE

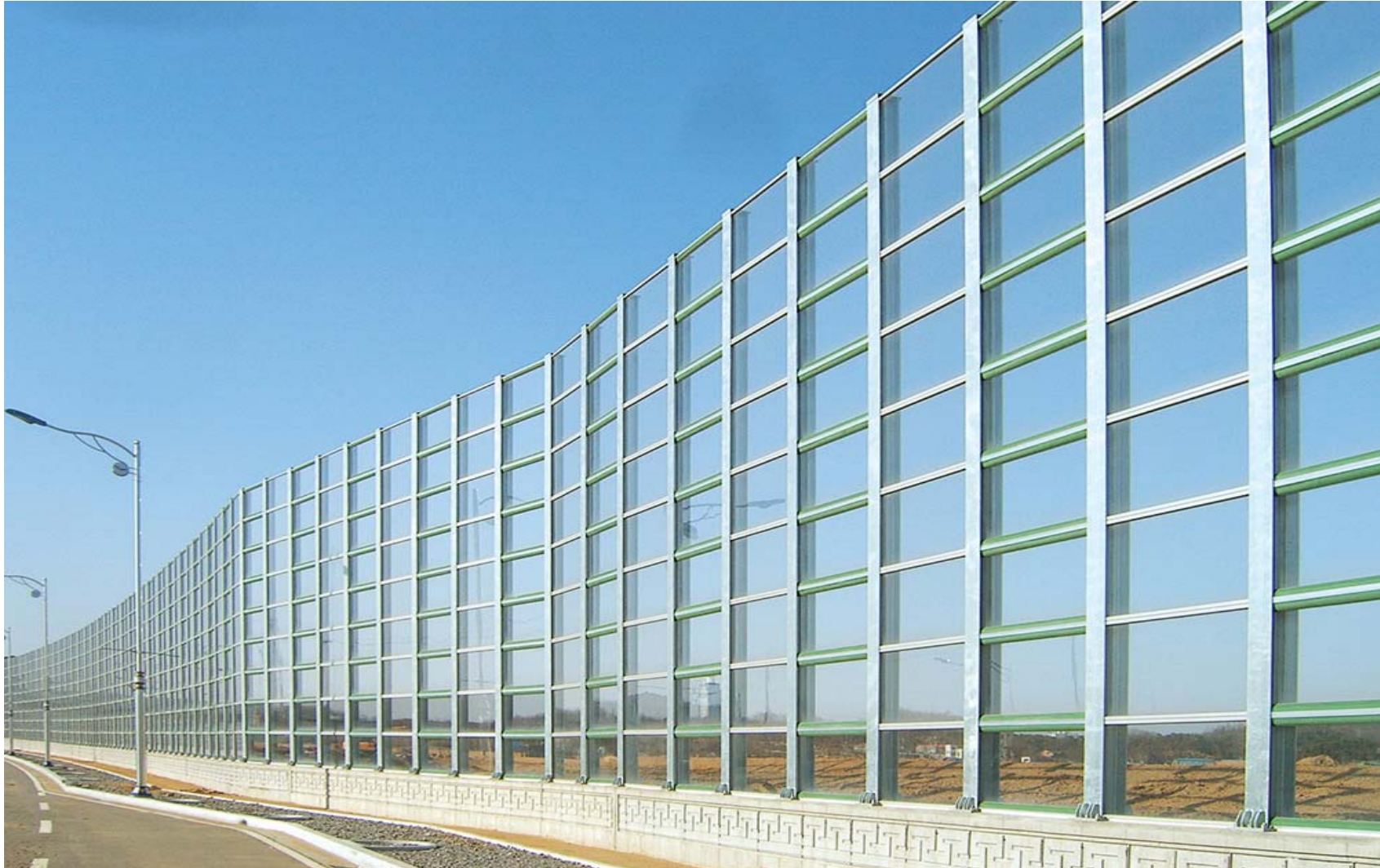


- Visual advantages (prevent the accident, view)
- Fire Resistance
- Cost-Effective

## PRODUCTS



### INSTALLED PRODUCT ON SITE



## PRODUCTS



### METALLIC PANEL (NOISE BARRIERS)

#### PRODUCT SHAPE



- Easy Installation
- High performance for Sound absorption
- Lots of References

# PRODUCTS



## INSTALLED PRODUCT ON SITE

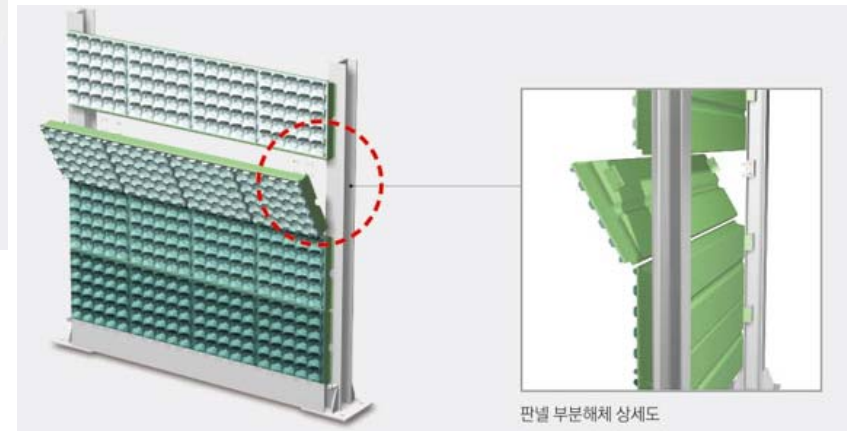


## PRODUCTS



### SYNTHETIC RESIN PANEL – (NOISE BARRIERS)

#### PRODUCT SHAPE



- High Performance for Sound absorption
- Partial replacement is possible
- Rust Resistance

## PRODUCTS



### INSTALLED PRODUCT ON SITE



# PRODUCTS



## ANCHOR & SUPPORT POST

### PRODUCT SHAPE



ANCHOR



SUPPORT POST



# PRODUCTS

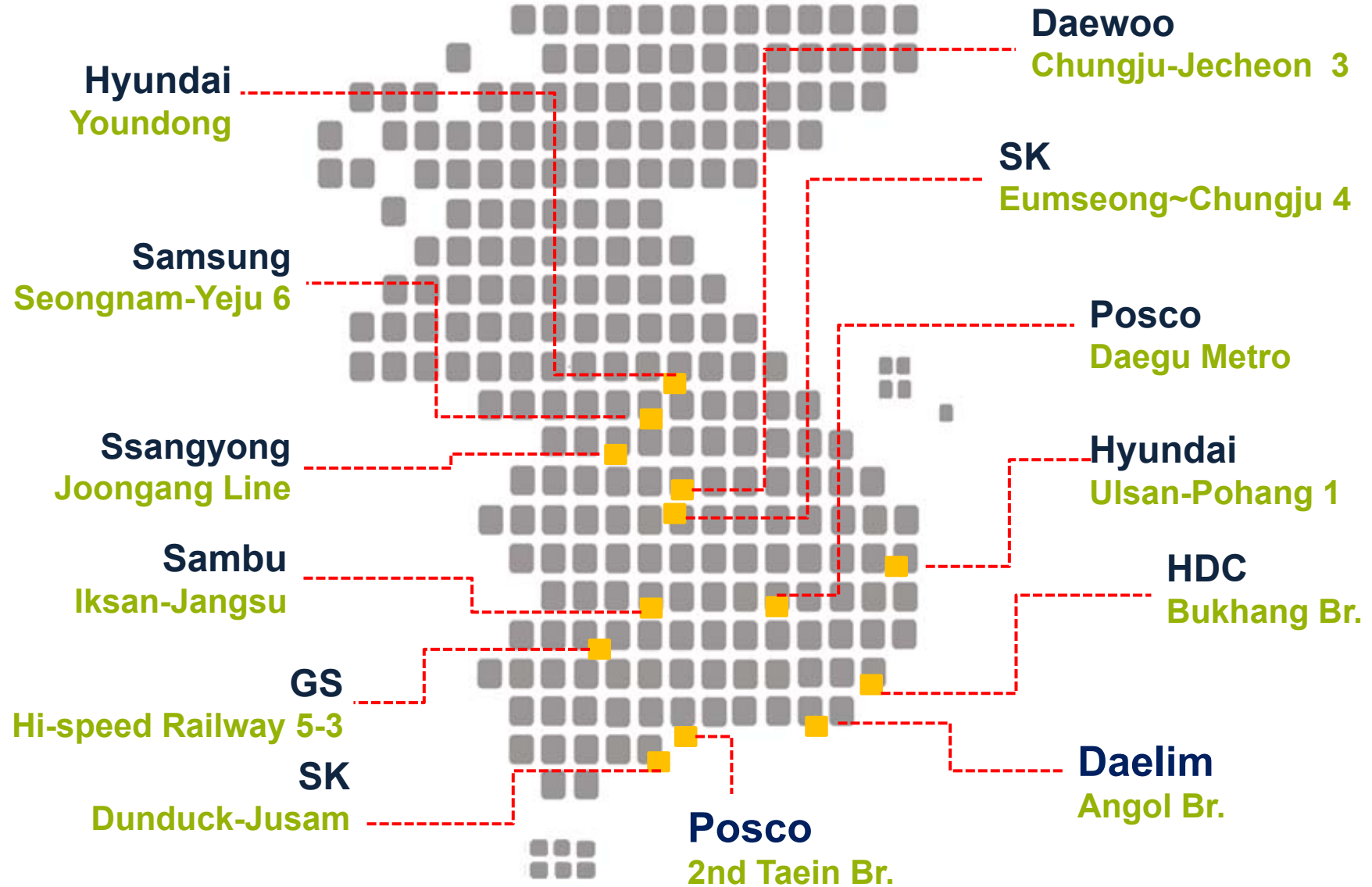
## SUPPORT POST – CORROSION PROTECTION METHOD

### CORROSION PROTECTION METHOD : POLYUREA



## REFERENCES

# REFERENCES



# REFERENCES



- |                            |                 |
|----------------------------|-----------------|
| 1. Bolivia                 | 11. Pakistan    |
| 2. Brunei                  | 12. Philippines |
| 3. Cambodia                | 13. Singapore   |
| 4. Indonesia               | 14. Sri Lanka   |
| 5. Kingdom of Saudi Arabia | 15. Thailand    |
| 6. Kuwait                  | 16. Turkey      |
| 7. New Zealand             | 17. UAE         |
| 8. Malaysia                | 18. Vietnam     |
| 9. Mongolia                | 19. Panama      |
| 10. Myanmar                | 20. Peru        |

# REFERENCES



Project	PANAMA METRO LINE 3
Products / Capacity	Expansion joints (Mov. 30~160mm) – 751 sets
Constructor	HPH JV
Client	Metro de Panama
Location	PANAMA

## REFERENCES



Project	Xayaburi Hydroelectric Power (Mekong River Bridge)	Constructor	CH. KARNCHANG (LAO)
Products / Capacity	Anti-uplift Spherical bearing (5000 kN) – 4nos	Client	Ministry of Energy
		Location	THAILAND

## REFERENCES



Project	Rama 3 -Dao Khanong-Western Bangkok Outer Ring Road Expressway	Constructor	CH. KARNCHANG
Products / Capacity	Pot bearing (5000~15300 kN) – 32nos	Client	Expressway Authority of Thailand
		Location	THAILAND

## REFERENCES



Project	Rehabilitation Railway Bridge
Products / Capacity	Spherical bearing (560 ~ 4415 kN) – 404nos

Constructor	Civil States
Client	SRT
Location	THAILAND

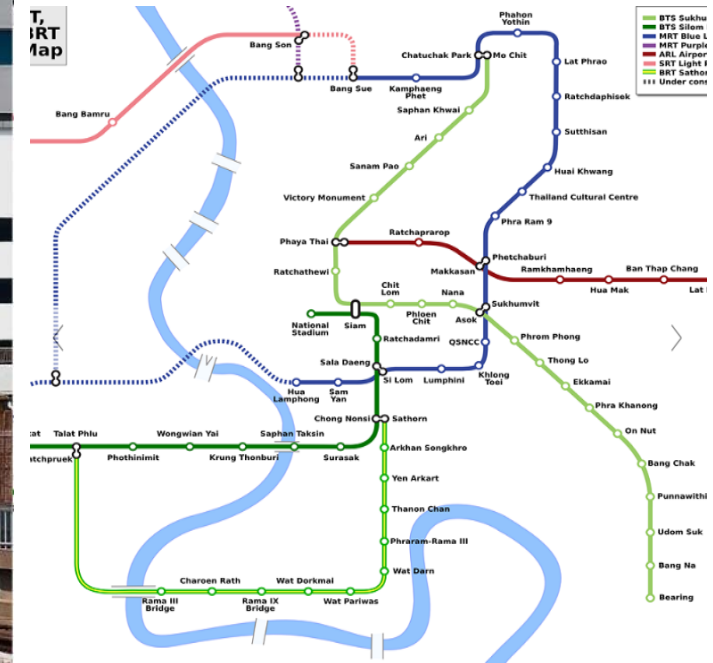
## REFERENCES



Project	<b>DOUBLE TRACK RAILWAY PROJECT NAKHON PATHOM-HUAHIN CONTRACT 2</b>
Products / Capacity	Spherical bearing (740 ~ 2450 kN) – 63 nos

Constructor	Civil States
Client	SRT
Location	THAILAND

# REFERENCES



Project	MRT Green Line
Products / Capacity	Pot bearing (2050 ~ 5500 kN) – 1004 nos

Constructor	ITD
Client	MRTA
Location	THAILAND

## REFERENCES



Project	MALOLOS - CLARK RAILWAY MCRP CP N-01	Constructor	HDEC-Megawide-Dongah JV
Products / Capacity	Elastomeric bearings (3337~5546kN) – 1782nos Pot bearings (2400~27100kN) – 56 nos	Client	DOTr
		Location	PHILIPPINES

## REFERENCES



Project	<b>Etihad Rail Network PKG. 2D</b>
Products / Capacity	Expansion joints (Mov. 150~560mm) – 1004m
Constructor	CRCC
Client	Etihad Rail
Location	UAE

## REFERENCES



Project	<b>MANGAWEKA BRIDGE</b>	Location	NEW ZEALAND
Products / Capacity	Anti-uplift Pot Bearing (2150 ~ 6350 kN) – 8 nos Elastomeric Bearing (320 ~ 640kN) – 16 nos Finger Joints (200MM) – 14.66m	Constructor	BAS (NZ)
		Client	Manawatu District Council & Rangitikei District Council

## REFERENCES



Waikato River Bridge Concept Design



Project

**PEACOCKE BRIDGE**

Location

NEW ZEALAND

Constructor

BAS (NZ)

Products /  
Capacity

Anti-uplift Pot Bearing (6000 kN) – 8 nos  
Pot Bearing (6500 kN) – 8 nos

Client

Hamilton City Council

## REFERENCES



Project	<b>Temburong Bridge CC2 (L=13.35km)</b>
Products / Capacity	HDRB (419~1274TON) – 1400 nos Swivel Exp. Joints (320MM) – 1150m

Constructor	Daelim Industrial Co., Ltd.
Client	Ministry of Public Works
Location	Brunei

## REFERENCES



Project

Riyadh Metro P3 (L=36.6km)

Constructor

Fast Consortium LLC

Products /  
Capacity

Pot Bearings (130~1100TON) – 659 nos  
Exp.Joint Phyzite380 (100~150MM) – 8555 m

Client

Arriyadh Development Authority

Location

Kingdom of Saudi Arabia

## REFERENCES



Project

**Bangkok Monorail (L=64km)  
Yellow & Pink Line**

Constructor

Sino Thai

Client

Mass Rapid Transit Authority of Thailand

Products /  
Capacity

**Monorail Bearings (156~310TON)  
– 8771 nos**

Location

Thailand

## REFERENCES



Project

Bangkok Monorail (L=64km)  
Yellow & Pink Line

Constructor

Sino Thai

Client

Mass Rapid Transit Authority of Thailand

Products /  
Capacity

Finger joints – 2064 sets

Location

Thailand

## REFERENCES



Project	Siak IV Cable Stayed Bridge
Products / Capacity	POT Bearings (500TON) Modular Exp. Joint (160mm)
Constructor	PT. Brantas Abipraya
Client	Pemerintah Propinsi Riau Dinas Pekerjaan Umum Dan Penataan Ruang
Location	Indonesia

## REFERENCES



Project	<b>Brantas Bridge</b>
Products / Capacity	POT Bearings (500~550TON) Modular Exp. Joint (240mm)
Constructor	PT Marga Harjaya Infrastructure
Client	Ministry of Public Works
Location	Indonesia

## REFERENCES



Project **Bogor Ring Road Seksi IIA**

Location Indonesia

Constructor PT Wijaya Karya Tbk

Products / Capacity POT Bearings (80~600TON) – 92 nos

Client PT Marga Sarana Jabar(MSJ)

## REFERENCES



Project	Ruwais Refinery Expansion Project Pkg#7 Marin Facilities
Products / Capacity	Spherical Bearings (175~240TON) – 843 nos
Constructor	GS ENGINEERING & Construction Corp.
Client	TAKREER
Location	UAE

## REFERENCES



Project	<b>Bac Hung Hai Bridge</b>	Constructor	UTRACON
Products / Capacity	Pot Bearings (105TON) – 12 nos Finger joints (160mm) – 61 m Footwalk joint (160mm) – 10.8 m	Client	Viet Hung Urban Development & Investment JCS
		Location	Vietnam

## REFERENCES



공사명	부전마산5공구
공종	교량받침
위치	신월역 승강장교량
내용	검측
일자	2019.07.01

Project	BUSEON-MASAN RAILWAY PKG #5 (8.21km)
Design speed	200km/h
Products / Capacity	Spherical bearing (225 TON) – 356 nos

Constructor	HANWHA E&C
Client	KRNA
Location	KOREA

## REFERENCES



Project	<b>DODAM-YEONGHEON RAILWAY</b> <b>PKG #3, #5, #7, #9, #10, #12 (145.1km)</b>
Design speed	250km/h
Products / Capacity	Spherical bearing (225 ~ 700 TON) – 1197 nos

Constructor	Pkg #3 : Daelim Industrial Co. Pkg #5 : HDC Pkg #7 : Hanshin E&C Pkg #9 : POSCO E&C Pkg #10 : Kumho Industrial Co. Pkg #12 : Hanshin E&C
Client	KRNA
Location	KOREA

# REFERENCES



Project	YEJU-MUNGYEONG(ICHEON-CHUNGJOO) Pkg #5(12.5km)
Design speed	230km/h
Products / Capacity	Spherical bearing (250 ~ 700 TON) – 208 nos

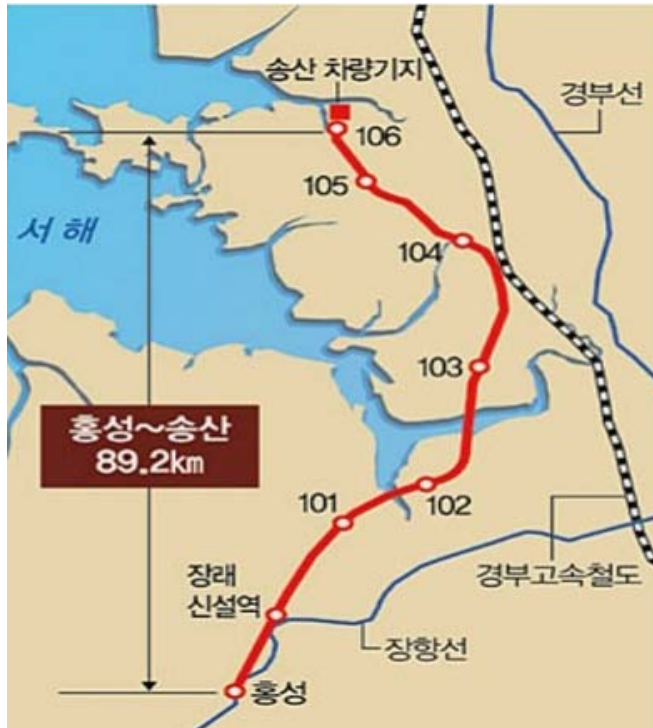
Constructor	KOREA DEVELOPMENT CO
Client	KRNA
Location	KOREA

# REFERENCES



Project	POHANG-SAMCHEOK RAILWAY PKG #2, #6, #9, #11, #12, #17 (166.2km)
Design speed	200km/h
Products / Capacity	Spherical bearing (250 ~ 1500 TON) – 1917 nos
Constructor	Pkg #2 : GS E&C. Pkg #6 : KCC E&C Pkg #9 : DAEWOO E&C Pkg #11 : SK E&C Pkg #12 : HYUNDAI E&C Pkg #17 : DOOSAN E&C
Client	KRNA
Location	KOREA

## REFERENCES



공사명	서해선8/대림
공종	교량받침
위치	상두1고가 P14
내용	MT검사
일자	2019.08.13

Project	SEOHAE LINE RAILWAY PKG #6 ~ #8 (22.809km)
Design speed	250km/h
Products / Capacity	Spherical bearing (200 ~ 1800 TON) – 2798 nos

Constructor	Pkg #6 : SEOHEE CON. Pkg #7 : KCC E&C Pkg #8 : DAELIM
Client	KRNA
Location	KOREA

## REFERENCES



Project	WONJU-GANGNEUNG RAILWAY PKG #11-2 (9.41km)
Design speed	200km/h
Products / Capacity	Spherical bearing (225 ~400 TON) – 626 nos

Constructor	SAMBU
Client	KRNA
Location	KOREA

## REFERENCES



Project	<b>HSR HONAM LINE</b> <b>PKG #1-3, #2-4, #4-3, #5-3</b>
Design speed	400km/h
Products / Capacity	Pot bearing (650 ~ 950 TON) – 1060 nos Spherical bearing (250 ~ 350 TON) – 254 nos

Constructor	Pkg #1-3 : DOOSAN Pkg #2-4 : SSANGYONG Pkg #4-3 : KCC E&C Pkg #5-3 : GS E&C
Client	KRNA
Location	KOREA

## REFERENCES



Project

Suwon-Incheon Double Track Railway Sec 3

Constructor

SSANGYONG

Design  
speed

120km/h

Client

KRNA

Products /  
Capacity

Spherical bearing (2000 ~ 3000 kN) – 680 nos

Location

KOREA

## REFERENCES



Project	Angol Bridge (L=765m)
Products / Capacity	Sliding Pendulum Isolators (190~6000TON)
Constructor	Daelim Industrial Co., Ltd.
Client	Minister of Land, Transport and Maritime Affairs
Location	Korea

## REFERENCES



Project	Geogum Bridge (L=2,028m)
Products / Capacity	Sliding Pendulum Isolators (2600TON, 3000TON)
Constructor	Hyundai Development Company
Client	Goheung County
Location	Korea

## REFERENCES



Project	Hwayang-Jeokgeum #2 (L=853m)
Products / Capacity	Elastomeric Bearings (1000, 1500, 3600TON) Wind Bearings (800, 1400TON) LUD
Constructor	Hyundai Development Company
Client	Iksan Regional Construction and Management Administration
Location	Korea

## REFERENCES



Project

**Bukhang Bridge (L=1,114m)**

Constructor

HDC-Hanjin-Samwhan JV

Products /  
Capacity

Pot Bearings (200~2250TON) – 112 nos  
LRB (400~1400TON) – 94 nos  
Wind Bearings (2000TON) – 4 nos  
LUDs (5000kN/+/-370mm) – 8 nos  
Modular Exp. Joint (80 ~ 320mm) – 180m

Client

Bukhang I-Bridge

Location

Korea

## REFERENCES



Project	Cheongpung Bridge (L=1,220m)
Products / Capacity	Pot Bearings, Wind Bearings Elastomeric Bearings (400~2400TON) Modular Exp.Joints (400mm)
Constructor	Daelim Industrial Co., Ltd.
Client	Minister of Land, Transport and Maritime Affairs
Location	Korea

## REFERENCES



Project	TAIWAN HIGH SPEED RAIL
Products / Capacity	10.000 Shear Keys Up to 44000 kN Capacity
Constructor	Evergreen, Bilfinger Berger and others
Client	Taiwan High Speed Rail
Location	Crimea

## REFERENCES



### NOISE BARRIERS

Client	Project	Product	Height, Length
GS E&C	Oksan-Ochang Expressway	Transparent, Sound absorption (metal)	L=9,059m, H=2~9m
KEC*	Outer-Seoul Songpa Interchange	Transparent, Sound absorption	L=23,128m, H=2~18m
SM Lines	Yongin-Giheung Ubang Jusell	Tampered Laminated Glass	L=74m, H=14m
Daejeon City	Daejeon-Hanam Bridge	Tampered Laminated Glass	L=300m, H=4m
LH**	Cheongju-Yulryang	Tampered Laminated Glass	L=600m, H=8m
KSC Construction	Gaebong Station Underground Tunnel	Tampered Laminated Glass	L=80m, H=4m
Chungnam Province	Seonjang-Yeomchi Provincial Road	Tampered Laminated Glass	L=700m, H=5m
Samjeong Ind. Dev.	Seoul Outer Expressway	Polycarbonate Panel	L=300m, H=12m
KEC*	Eonyang-Yeongcheon Expressway	PMMA Panel	L=1,200m, H=7~12m
KEC*	Yeosu-Gangleung Expressway	Polycarbonate Panel	L=2,000m, H=1~5m
LH**	Daedeok R&D (Honam Expressway)	PMMA Panel	L=700m, H=15~18.5m
LH**	Seochang 2 <sup>nd</sup> District	PMMA Panel	L=2,500m, H=12~18m
KEC*	Unjung Bridge (Seoul Expressway)	PMMA Panel	L=670m, H=6m

## REFERENCES



### NOISE BARRIERS

Client	Project	Product	Height, Length
LH**	Namyangju Byeolnaejigu	Polycarbonate Panel	L=1,650m, H=11~13m
KEC*	Sangju-Andong Expressway	PMMA Panel	L=1,100m, H=1~2m
KEC*	North Daejeon Interchange	PMMA Panel	L=250m, H=2m
KEC*	Gyeongbu Expressway	PMMA Panel	L=150m, H=5m
KEC*	Seochang JC	Polycarbonate Panel	L=2,500m, H=12~18m
KEC*	Sinjinju Namhae Expressway	Polycarbonate Panel	L=600m, H=9~24m
KEC*	Daedeok R&D (Honam Expressway)	PMMA Panel	L=700m, H=15~18.5m
KEC*	Geumcheon Lotte Castle	PMMA Panel	L=250m, H=9~17m

\*KEC : Korea Expressway Corporation

\*\*LH : Korea Land & Housing Corporation

# SONGPA INTERCHANGE (SEOUL CITY)



# OKSAN-OUCHANG EXPRESSWAY





## CHEONGJU-YULRYANG



## GAEBONG STATION UNDERGROUND TUNNEL



# NORTH DAEJEON INTERCHANGE



# NOISE BARRIER REMODELING (SYNTHETIC RESIN)



① BEFORE REMODELING



② RUST REMOVAL



③ BARRIER REMODELING



④ FIXING FRAME INSTALL



⑤ PANEL INSTALL



⑥ AFTER REMODELING

# NOISE BARRIER REMODELING (METALIC)



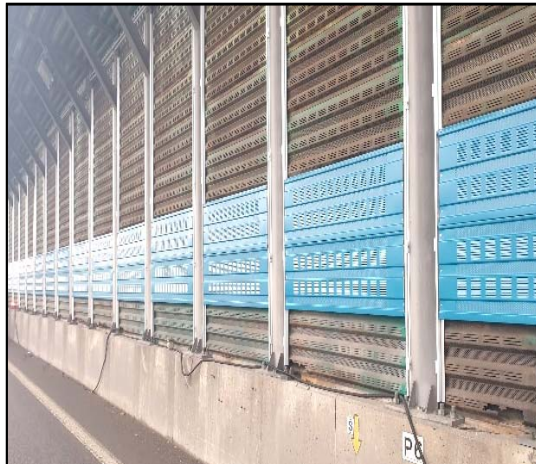
① BEFORE REMODELING



② FIXING ANGLE INSTALL



③ FIXING PLATE INSTALL



④ PANEL INSTALL



⑤ COVER PLATE INSTALL



⑥ AFTER REMODELING

# NOISE BARRIER REMODELING (POLYUREA COATING)

