

Construction



# Sika<sup>®</sup> Technologies for Seismic Upgrading and Supporting Earthquake Recovery

**Sika**<sup>®</sup>

# Sika® Technologies for Seismic Upgrading and Supporting Earthquake Recovery

## Engineering Assessment

### No Damage

#### Retrofitting

##### Problems

- Increased loading
- Inadequate design or construction
- Strengthening against potentially increased shear forces
- Strengthening to meet current design standards for seismic action
- General refurbishment and seismic upgrade

##### Sika Solutions

###### Anchoring

- Bonding steel anchors and additional reinforcement with **Sika AnchorFix®** – and **Sikadur®** range of structural bonding systems

###### Stiffening

- **Sika®** spray applied concrete systems
- Installation of infill panels or **Sikadur®** resin bonded steel bracings

###### Strengthening

- Structural strengthening with **Sika® CarboDur®** plates, **Sika® CarboShear L®** plates and **SikaWrap®** fabrics
- Increased ductility with **Sika® CarboDur®** plates, **Sika® CarboShear L®** plates and **SikaWrap®** fabrics
- Prestressed **Sika® CarboDur®** systems



### Minor Damage

#### Repair

##### Problems

- Spalling concrete
- Cracks in concrete, infill walls and masonry

##### Sika Solutions

###### Spalling Concrete

- Repair and corrosion protection of steel in areas of damaged concrete with **Sika® MonoTop®** hand or spray applied repair mortars

###### Surface Finishing

- Surface restoration, reprofiling and aesthetic improvement with **Sika® MonoTop®** levelling and reprofiling mortars plus **Sikagard®** protective coatings

###### Crack Injection

- **Sika®** cementitious injection systems for the stabilization of brick walls and masonry
- Sealing of cracks in concrete with the **Sikadur®** range of structural resin injection systems



### Structural Damage

#### Strengthening

##### Problems

- Cracks in concrete and masonry walls
- Unacceptable deflections
- Steel yielding
- Local reinforcement buckling

##### Sika Solutions

###### Crack Injection

- Structural bonding and sealing of cracked concrete and masonry with the **Sikadur®** range of structural resin injection systems

###### Anchoring

- Bonding steel anchors and additional reinforcement with the **Sika AnchorFix®** and **Sikadur®** ranges of structural resin bonding systems

###### Stiffening

- **Sika®** spray applied concrete systems
- Installation of infill panels with **Sikadur®** resin bonded steel bracings

###### Strengthening

- Structural strengthening with **Sika® CarboDur®** plates, **Sika® CarboShear L®** plates and **SikaWrap®** fabrics
- Increased ductility with **Sika® CarboDur®** plates, **Sika® CarboShear L®** plates and **SikaWrap®** fabrics
- Prestressed **Sika® CarboDur®** systems



### Excessive Damage

#### Demolition/New Construction

##### Problems

- Excessive structural damage

##### Sika Solutions

- Concrete technology (**Sika® ViscoCrete®**)
- Grouting/anchoring technology (**SikaGrout®**, **Sika AnchorFix®**)
- Waterproofing systems (**Sikaplan®**, **Sika® Waterbars**)
- Sealing and bonding technology (**Sikaflex®**, **SikaBond®**, **Sikadur®**)
- Flooring systems (**Sikafloor®**)
- Roofing systems (**Sikaplan®**, **Trocal®**, **Carisma®**)
- Segmental bridge adhesives (**Sika® CableGrout**, **Sikadur® SBA**)
- Steel corrosion (**Icosit®**, **Sika® FerroGard®**)
- Application equipment (**Aliva®**)



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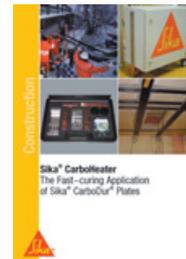
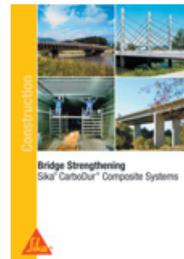
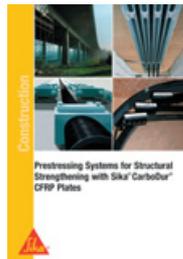
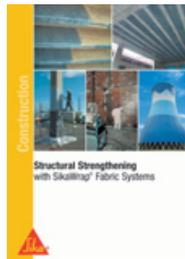
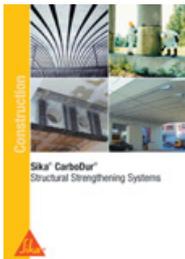
## Sika – Your Local Partner with a Global Presence

Sika is a multinational company in the speciality and construction chemicals business. It has subsidiary manufacturing, sales and technical support facilities in over 70 countries around the world. Sika is THE global market and technology leader in waterproofing, sealing, bonding, damping, strengthening and protection of buildings and civil engineering structures.

Sika has more than 9'200 employees in these subsidiary companies' facilities that are therefore ideally positioned to support the success of our partners – both our suppliers and our customers.



## Also available from Sika



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