Annual table of contents

Editor-in-Chief:
Luc Taerwe

Deputy Editor:
Steinar Helland

Members:
György L. Balázs
Josée Bastien
Mikael Braestrup
Tom d’Arcy
Michael Fardis

Stephen Foster
Sung Gul Hong
Tim Ibell
S.G. Joglekar
Akio Kasuga
Daniel A. Kuchma
Gaetano Manfredi
Pierre Rossi
Guilhemo Sales Melo
Petra Schumacher
Tamon Ueda
Yong Yuan
## List of authors

(T = Technical Paper, E = Editorial)

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Issue</th>
<th>Page Range</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmad, Syed Ishtiaq; Tanabe, Tada-aki</td>
<td></td>
<td>51–59</td>
<td>T</td>
</tr>
<tr>
<td>Structural Concrete: Annual table of contents Volume 14 (2013)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three-dimensional FE analysis of reinforced concrete structures using the lattice equivalent continuum method</td>
<td></td>
<td>29–42</td>
<td>T</td>
</tr>
<tr>
<td>Allaix, Diego Lorenzo; Carbone, Vincenzo Ilario; Mancini, Giuseppe</td>
<td></td>
<td>19–28</td>
<td>T</td>
</tr>
<tr>
<td>Global safety format for non-linear analysis of reinforced concrete structures</td>
<td></td>
<td>19–28</td>
<td>T</td>
</tr>
<tr>
<td>Anders, Isabel; see Müller, Harald S.</td>
<td></td>
<td>99–123</td>
<td>T</td>
</tr>
<tr>
<td>Ayoub, Essam; Malek, Charles; Helmy, Gamal: Highlights of the design and construction of a 12 km elevated APM bridge project in Saudi Arabia</td>
<td></td>
<td>242–249</td>
<td>T</td>
</tr>
<tr>
<td>Bigaj-van Vliet, Agnieszka; Vrouwenvelder, Ton: Reliability in the performance-based concept of fib Model Code 2010</td>
<td></td>
<td>309–319</td>
<td>T</td>
</tr>
<tr>
<td>Bisch, Philippe; see Balázs, György L.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clément, Thibault; Ramos, António Pinho; Fernández Ruiz, Miguel; Muttoni, Aurelio: Design for punching of prestressed concrete slabs</td>
<td></td>
<td>342–361</td>
<td>T</td>
</tr>
<tr>
<td>Colombo, Matteo; see di Prisco, Marco</td>
<td></td>
<td>87–88</td>
<td>E</td>
</tr>
<tr>
<td>Curbach, Manfred: Concrete light – possibilities and visions</td>
<td></td>
<td>87–88</td>
<td>E</td>
</tr>
<tr>
<td>Corres-Peiretti, Hugo; see Pérez Caldentey, Alejandro</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curbach, Manfred; see Zanuy, Carlos</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davies, Robert; see Isaacs, Ben Debernardi, Piergiorgio; see Balázs, György L.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curbach, Manfred: Concrete light – possibilities and visions</td>
<td></td>
<td>342–361</td>
<td>T</td>
</tr>
<tr>
<td>Curbach, Manfred: Concrete light – possibilities and visions</td>
<td></td>
<td>342–361</td>
<td>T</td>
</tr>
<tr>
<td>Bisc, Philippe; see Balázs, György L.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balázs, György L.; see Walraven, Joost</td>
<td></td>
<td>99–123</td>
<td>T</td>
</tr>
<tr>
<td>Dozio, Daniele; Fibre-reinforced concrete in fib Model Code 2010: principles, models and test validation</td>
<td></td>
<td>342–361</td>
<td>T</td>
</tr>
<tr>
<td>Balázs, György L.; see Walraven, Joost</td>
<td></td>
<td>99–123</td>
<td>T</td>
</tr>
<tr>
<td>Bentz, Evan; see Muttoni, Aurelio</td>
<td></td>
<td>224–249</td>
<td>T</td>
</tr>
<tr>
<td>Bisch, Philippe; see Balázs, György L.</td>
<td></td>
<td>242–249</td>
<td>T</td>
</tr>
<tr>
<td>Bisch, Philippe; see Balázs, György L.</td>
<td></td>
<td>242–249</td>
<td>T</td>
</tr>
<tr>
<td>Bigaj-van Vliet, Agnieszka; Vrouwenvelder, Ton: Reliability in the performance-based concept of fib Model Code 2010</td>
<td></td>
<td>309–319</td>
<td>T</td>
</tr>
<tr>
<td>Bigaj-van Vliet, Agnieszka; see Matthews, Stuart</td>
<td></td>
<td>309–319</td>
<td>T</td>
</tr>
<tr>
<td>Bigaj-van Vliet, Agnieszka; see Matthews, Stuart</td>
<td></td>
<td>309–319</td>
<td>T</td>
</tr>
<tr>
<td>Bigaj-van Vliet, Agnieszka; Vrouwenvelder, Ton: Reliability in the performance-based concept of fib Model Code 2010</td>
<td></td>
<td>309–319</td>
<td>T</td>
</tr>
<tr>
<td>Bigaj-van Vliet, Agnieszka; see Matthews, Stuart</td>
<td></td>
<td>309–319</td>
<td>T</td>
</tr>
</tbody>
</table>

Faria, Duarte M. Viúla; see Silva, Ricardo

Fehling, Ekkehard; see Balázs, György L.

Fernández Ruiz, Miguel; see Clément, Thibault

Fernández Ruiz, Miguel; see Muttoni, Aurelio

Foster, Stephen J.; see Ng, Tian Sing

Foster, Stephen: Physical understandings and development of mechanical models for the design of concrete structures Issue 3 193–194 E

Foster, Stephen J.; see Muttoni, Aurelio

Foster, Stephen; see Sigrist, Viktor

Ghali, Amin; see Balázs, György L.

Giraldo Soto, Alejandro; see Pérez Caldentey, Alejandro

Gribniak, Viktor; see Balázs, György L.

Guiglia, Matteo; see Balázs, György L.

Helland, Steinar: Design for service life: implementation of \textit{fib} Model Code 2010 rules in the operational code ISO 16204 Issue 1 10–18 T

Helmy, Gamal; see Ayoub, Essam

Hendriks, Max A. N.; see Belletti, Beatrice

Hsiue, Kai-Yuan; see Lee, Tai-Kuang

Hwa, Ken; see Lee, Tai-Kuang

Ichinomiya, Toshimichi; see Yamanobe, Shinichí

Ináció, Micael; see Silva, Ricardo

Isaacs, Ben; Lark, Robert; Jefferson, Tony; Davies, Robert; Dunn, Simon: Crack healing of cementitious materials using shrinkable polymer tendons Issue 2 138–147 T

Iskakov, Iakov; Ribakov, Yuri: Two-layer concrete bridge beams as composite elements Issue 3 271–277 T

Jefferson, Tony; see Isaacs, Ben

Jiang, Huanjun; see Lu, Xilin

Kaklauskas, Gintaris; see Balázs, György L.

Kanamitsu, Yoshihisa; see Yamanobe, Shinichí

Khazraiyan, Najmeh; Liaghat, Gholam Hossein; Khodarahmi, Hossein: Normal impact of hard projectiles on concrete targets Issue 2 176–183 T

Khodarahmi, Hossein; see Khazraiyan, Najmeh

Kim, Jung-Chul; see Seo, Tae-Seok

Lark, Robert J.; see Balázs, György L.

Lark, Robert; see Isaacs, Ben

Le Maou, Fabrice; see Tailhan, Jean-Louis

Lee, Tai-Kuang; Chen, Cheng-Cheng; Pan, Austin D.E.; Hsiue, Kai-Yuan; Tsai, Weiming; Hwa, Ken: Experimental evaluation of large circular RC columns under pure compression Issue 1 60–68 T

Letzki, Peter; see Balázs, György L.

Liaghat, Gholam Hossein; see Khazraiyan, Najmeh

Lindorf, Alexander; see Zanuy, Carlos

Lorrain, Michel; see Balázs, György L.

Lu, Xilin; Yin, Xiaowei; Jiang, Huanjun: Restoring force model for steel reinforced concrete columns with high steel ratio Issue 4 415–422 T

Lurati, Franco; see Muttoni, Aurelio

Malek, Charles; see Ayoub, Essam

Mancini, Giuseppe; see Allaix, Diego Lorenzo

Martin, Eric; see Tailhan, Jean-Louis

Marí, Antonio; see Balázs, György L.

Matthews, Stuart; Bigaj-van Vliet, Agnieszka: Conservation of concrete structures according to \textit{fib} Model Code 2010 Issue 4 362–377 T

Matthys, Stijn; see Triantafillou, Thanasis

Muttoni, Aurelio; Lurati, Franco; Fernández Ruiz, Miguel: Concrete shells – towards efficient structures: construction of an ellipsoidal concrete shell in Switzerland Issue 1 43–50 T

Muttoni, Aurelio; Ruiz, Miguel Fernández; Bentz, Evan; Foster, Stephen; Sigrist, Viktor: Background to \textit{fib} Model Code 2010 shear provisions – part II: punching shear Issue 3 204–214 T

Muttoni, Aurelio; see Clément, Thibault

Muttoni, Aurelio; see Sigrist, Viktor

Müller, Harald S.: Sustainable structural concrete – from today's approach to future challenge Issue 4 299–300 E

Müller, Harald S.; Anders, Isabel; Breiner, Raphael; Vogel, Michael: Concrete: treatment of types and properties in \textit{fib} Model Code 2010 Issue 4 320–334 T

Ng, Tian Sing; Foster, Stephen J.: Development of a mix design methodology for high-performance geopolymer mortars Issue 2 148–156 T

Ozbolt, Josko; see Balázs, György L.

Ozbolt, Josko; see Zanuy, Carlos

www.ernst-und-sohn.de
Phan, Thanh Song; Taihan, Jean-Louis; Rossi, Pierre: 3D numerical modelling of concrete structural element reinforced with ribbed flat steel rebars

Pérez Caldentey, Alejandro; Corres Peiretti, Hugo; Peset Iribarren, Joan; Giraldo Soto, Alejandro: Cracking of RC members revisited: influence of cover, $\phi/\rho_{s,ef}$ and stirrup spacing – an experimental and theoretical study

Pérez Caldentey, Alejandro; Ramos, António Pinho; Silva, Ricardo

Randl, Norbert: Design recommendations for interface shear transfer in fib Model Code 2010

Ribakov, Yuri; see Iskhakov, Iakov

Rossi, Pierre; see Phan, Thanh Song

Rossi, Pierre; see Taihan, Jean-Louis

Ruiz, Miguel Fernández; see Muttoni, Aurelio

Sagaseta, Juan: The influence of aggregate fracture on the shear strength of reinforced concrete beams: an experimental and analytical research project

Saito, Kimio; see Yamanobe, Shinichii

Sakai, Koji: Sustainability in fib Model Code 2010 and its future perspective

Seo, Tae-Seok; Kim, Jung-Chul: Behaviour of concrete in a stress continuity region after cracking under restrained drying shrinkage

Sigrist, Viktor; Bentz, Evan; Ruiz, Miguel Fernández; Foster, Stephen; Muttoni, Aurelio: Background to the fib Model Code 2010 shear provisions – part I: beams and slabs

Sigrist, Viktor; see Muttoni, Aurelio

Silva, Ricardo; Faria, Duarte M. Viúla; Ramos, A. Pinho; Inácio, Micael: A physical approach for considering how anchorage head size influences the punching capacity of slabs strengthened with vertical steel bolts

Tailhan, Jean-Louis; Boulay, Claude; Rossi, Pierre; Le Maou, Fabrice; Martin, Eric: Compressive, tensile and bending basic creep behaviours related to the same concrete

Tailhan, Jean-Louis; see Phan, Thanh Song

Taliano, Maurizio; see Balázs, György L.

Tanabe, Tada-aki; see Ahmad, Syed Ishtiaq

Tawana, M.M.; see Xiao, Jianzhuan

Tkalcic, Damir; see Balázs, György L.

Torreli, Jean Michel; see Balázs, György L.

Torres, Luis; see Balázs, György L.

Toutlemonde, François; see Balázs, György L.

Triantafillou, Thanasis; Matthys, Stijn: Fibre-reinforced polymer reinforcement enters fib Model Code 2010

Tsai, Wei-Ming; see Lee, Tai-Kuang

Ueda, Tamon; see Balázs, György L.

Vitek, Jan L.; see Balázs, György L.

Vogel, Michael; see Müller, Harald S.

Vrouwenvelder, Ton; see Bigaj-van Vliet, Agnieszka

Vráblík, Luká; see Balázs, György L.

Walraven, Joost: fib Model Code for Concrete Structures 2010: mastering challenges and encountering new ones

Walraven, Joost; Balázs, György L: fib Model Code for Concrete Structures 2010: a landmark in an ongoing development

Walraven, Joost C.; see Belletti, Beatrice

Xiao, Jianzhuan; Fan, Yuhui; Tawana, M.M.: Residual compressive and flexural strength of a recycled aggregate concrete following elevated temperatures

Yamanobe, Shinichii; Saito, Kimio; Ichinomiya, Toshimichi; Kanamitsu, Yoshihisa: Bilateral loading experiment on and analysis of concrete piers using mortar-jointed ultra-high-strength fibre-reinforced concrete precast formwork

Yin, Xiaowei; see Lu, Xilin

Zanuy, Carlos; Curbach, Manfred; Lindorf, Alexander: Finite element study of bond strength between concrete and reinforcement under uneven confinement condition
Analysis and design methods

Ahmad, Syed Ishtiaq; Tanabe, Tada-aki: Three-dimensional FE analysis of reinforced concrete structures using the lattice equivalent continuum method [finite element; three-dimensional model; simulation; reinforced concrete; ultimate strength; concrete structure; lattice; model] Issue 1 51–59

Allaix, Diego Lorenzo; Carbone, Vincenzo Ilario; Mancini, Giuseppe: Global safety format for non-linear analysis of reinforced concrete structures [safety format; non-linear analysis; reinforced concrete structures; global resistance factors; Monte Carlo method] Issue 1 29–42

Balázs, György L.; Bisch, Philippe; Borosnýói, Adorján; Burdet, Olivier; Burns, Clare; Ceroni, Francesca; Cervenka, Vladimir; Chiorino, Mario A.; Debernardi, Piergiorgio; Eckfeldt, Lars; El-Badry, Mamdouh; Fehling, Ekkehard; Foster, Stephen J.; Ghali, Amin; Gribsniak, Viktor; Guiglia, Matteo; Kaklauskas, Gintaras; Lark, Robert J.; Lenkei, Peter; Lorrain, Michel; Marí, Antonio; Ozbolt, Josko; Pecece, Marisa; Pérez Caldentey, Alejandro; Talliano, Maurizio; Tkalec, Damir; Torrenti, Jean Michel; Torres, Lluis; Toutlemonde, François; Ueda, Tamon; Vitek, Jan L.; Vráblík, Luká: Design for SLS according to fib Model Code 2010 [MC2010; SLS; serviceability; cracking; crack control; crack width limits; appearance; tightness; durability; bond; concrete cover; tension stiffening; deflection; span-depth ratio; long-term deformations; fib Model Code 2010] Issue 2 99–123

Belletti, Beatrice; Damoni, Cecilia; den Uijl, Joop A.; Hendriks, Max A. N.; Walraven, Joost C.: Shear resistance evaluation of prestressed concrete bridge beams: fib Model Code 2010 guidelines for level IV approximations [shear resistance; safety levels; non-linear finite element analyses; prestressed beams; guidelines] Issue 3 242–249

Cervenka, Vladimir: Reliability-based non-linear analysis according to fib Model Code 2010 [non-linear analysis; safety formats; reliability; fib Model Code 2010] Issue 1 19–28

Clément, Thibault; Ramos, António Pinho; Fernández Ruiz, Miguel; Muttoni, Aurelio: Design for punching of prestressed concrete slabs [punching; flat slab; slab bridge; prestressing; in-plane forces; code predictions; Model Code 2010] Issue 2 157–167

di Prisco, Marco; Colombo, Matteo; Dozio, Daniele: Fibre-reinforced concrete in fib Model Code 2010: principles, models and test validation [fibre-reinforced concrete; constitutive equations; identification; modeling; structural characteristic length; structural behaviour; redundancy; structural design] Issue 4 342–361


Iskhakov, Iakov; Ribakov, Yuri: Two-layer concrete bridge beams as composite elements [high-performance concrete element; high-strength concrete; bridge beams; fibre-reinforced concrete] Issue 3 271–277

Khazraiyan, Najmeh; Liaghat, Gholam Hossein; Khodarahmi, Hossein: Normal impact of hard projectiles on concrete targets [perforation process; concrete structure; analytical model; hemispherical rigid projectile] Issue 2 176–183

Lu, Xilin; Yin, Xiaowei; Jiang, Huanjun: Restoring force model for steel reinforced concrete columns with high steel ratio [SRC; high ratio of encased steel; restoring force model; skeleton curve] Issue 4 415–422

Ng, Tian Sing; Foster, Stephen J.: Development of a mix design methodology for high-performance geopolymer mortars [geopolymer mortar; fly ash; mix design; compressive strength] Issue 2 148–156
Phan, Thanh Song; Tailhan, Jean-Louis; Rossi, Pierre: 3D numerical modelling of concrete structural element reinforced with ribbed flat steel rebars [reinforced concrete structures; flat steel rebar; concrete/rebar bond; cracking] Issue 4 378–388

Randl, Norbert: Design recommendations for interface shear transfer in fib Model Code 2010 [interface shear; dowel action; bond; aggregate interlock] Issue 3 230–241

Sagaseta, Juan: The influence of aggregate fracture on the shear strength of reinforced concrete beams: an experimental and analytical research project [shear strength; aggregate interlock; high-performance concrete; strut-and-tie method; nonlinear finite element analysis] Issue 4 401–414

Sigrist, Viktor; Bentz, Evan; Ruiz, Miguel Fernández; Foster, Stephen; Muttoni, Aurelio: Background to the fib Model Code 2010 shear provisions – part I: beams and slabs [fib; Model Code; prestressed concrete; reinforced concrete; shear; design] Issue 3 195–203

Silva, Ricardo; Faria, Duarte M. Viúla; Ramos, A. Pinho; Inácio, Miguel: A physical approach for considering how anchorage head size influences the punching capacity of slabs strengthened with vertical steel bolts [punching; physical models; concrete crushing; anchorage; vertical steel bolts; strengthening; flat slabs] Issue 4 389–400

Tailhan, Jean-Louis; Boulay, Claude; Rossi, Pierre; Le Maou, Fabrice; Martin, Eric: Compressive, tensile and bending basic creep behaviours related to the same concrete [concrete; creep; compression; tension; bending] Issue 2 124–130


Zanuy, Carlos; Curbach, Manfred; Lindorf, Alexander: Finite element study of bond strength between concrete and reinforcement under uneven confinement condition [bond; confinement; finite element analysis; pull-out test; transverse tension] Issue 3 260–270

Anchorage
Silva, Ricardo; Faria, Duarte M. Viúla; Ramos, A. Pinho; Inácio, Miguel: A physical approach for considering how anchorage head size influences the punching capacity of slabs strengthened with vertical steel bolts [punching; physical models; concrete crushing; anchorage; vertical steel bolts; strengthening; flat slabs] Issue 4 389–400

Zanuy, Carlos; Curbach, Manfred; Lindorf, Alexander: Finite element study of bond strength between concrete and reinforcement under uneven confinement condition [bond; confinement; finite element analysis; pull-out test; transverse tension] Issue 3 260–270

Art of engineering
Corres-Peiretti, Hugo: Sound engineering through conceptual design according to the fib Model Code 2010 [conceptual design; fib Model Code 2010; concrete structures] Issue 2 89–98

Muttoni, Aurelio; Lurati, Franco; Fernández Ruiz, Miguel: Concrete shells – towards efficient structures: construction of an ellipsoidal concrete shell in Switzerland [shell; concrete structure; design; sprayed concrete; fibre-reinforced concrete; architecture] Issue 1 43–50

Bridge construction
Ayoub, Essam; Malek, Charles; Helmy, Gamal: Highlights of the design and construction of a 12 km elevated APM bridge project in Saudi Arabia [precast construction; bridges; prestressing; stress analysis; unsymmetrical beam; box girder; curved structure] Issue 3 250–259

Iskhakov, Iakov; Ribakov, Yuri: Two-layer concrete bridge beams as composite elements [high-performance concrete element; high-strength concrete; bridge beams; fibre-reinforced concrete] Issue 3 271–277

Yamanobe, Shinichi; Saito, Kimio; Ichinomiya, Toshimichi; Kanamitsu, Yoshihisa: Bilateral loading experiment on and analysis of concrete piers using mortar-jointed ultra-high-strength fibre-reinforced concrete precast formwork [damage-free
Annual table of contents 2013

Structural Concrete 14

www.ernst-and-sohn.de

Building maintenance/refurbishment

Matthews, Stuart; Bigaj-van Vliet, Agnieszka: Conservation of concrete structures according to fib Model Code 2010 [conservation; assessment; evaluation; condition control; intervention; fib Model Code 2010] Issue 3 278–290

Building materials/construction materials

Ahmad, Syed Ishtiaq; Tanabe, Tada-aki: Three-dimensional FE analysis of reinforced concrete structures using the lattice equivalent continuum method [finite element; three-dimensional model; simulation; reinforced concrete; ultimate strength; concrete structure; lattice; model] Issue 1 51–59

di Prisco, Marco; Colotto, Matteo; Dozio, Daniela: Fibre-reinforced concrete in fib Model Code 2010: principles, models and test validation [fibre-reinforced concrete; constitutive equations; identification; modelling; structural characteristic length; structural behaviour; redundancy; structural design] Issue 4 342–361

Isaacs, Ben; Lark, Robert; Jefferson, Tony; Davies, Robert; Dunn, Simon: Crack healing of cementitious materials using shrinkable polymer tendons [crack closure; autogenous healing; durability; polymer tendons] Issue 2 138–147

Müller, Harald S.; Anders, Isabel; Breiner, Raphael; Vogel, Michael: Concrete: treatment of types and properties in fib Model Code 2010 [fib Model Code 2010; structural concrete; concrete properties; material models; creep and shrinkage; durability; service life design] Issue 4 320–334

Ng, Tian Sing; Foster, Stephen J.: Development of a mix design methodology for high-performance geopolymer mortars [geopolymer mortar; fly ash; mix design; compressive strength] Issue 2 148–156

Seo, Tae-Seok; Kim, Jung-Chul: Behaviour of concrete in a stress continuity region after cracking under restrained drying shrinkage [shrinkage; uniaxial restrained specimen; stress continuity region; bond analysis; effective tensile Young’s modulus] Issue 2 131–137

Tailhan, Jean-Louis; Boulay, Claude; Rossi, Pierre; Le Maou, Fabrice; Martin, Eric: Compressive, tensile and bending basic creep behaviours related to the same concrete [concrete; creep; compression; tension; bending] Issue 2 124–130

Xiao, Jianzhuang; Fan, Yuhui; Tawana, M.M.: Residual compressive and flexural strength of a recycled aggregate concrete following elevated temperatures [recycled aggregate concrete (RAC); recycled coarse aggregates (RCAs); residual compressive strength; residual flexural strength; elevated temperature] Issue 2 168–175

Design and construction

Ayoub, Essam; Malek, Charles; Helmy, Gamal: Highlights of the design and construction of a 12 km elevated APM bridge project in Saudi Arabia [precast construction; bridges; prestressing; stress analysis; unsymmetrical beam; box girder; curved structure] Issue 3 250–259

Balázs, György L.; Bischof, Philippe; Borosnyói, Adorján; Burdet, Olivier; Burns, Clare; Ceroni, Francesca; Cervenka, Vladimír; Chiorino, Mario A.; Debernardi, Piergiorgio; Eckfeldt, Lars; El-Badry, Mamdouh; Fehling, Ekkehard; Foster, Stephen J.; Ghali, Amin; Gribniak, Viktor; Guiglia, Matteo; Kalakuska, Gintaris; Lark, Robert J.; Lenkei, Peter; Lorrain, Michel; Marí, Antonio; Ozbolt, Josko; Pece, Marisa; Pérez Caldentey, Alejandro; Taliano, Maurizio; Tkalcic, Damir; Torrenti, Jean Michel; Torres, Luis; Toutlemonde, François; Ueda, Tamon; Vitek, Jan L.; Vráblík, Luká: Design for SLS according to fib Model Code 2010 [MC2010; SLS; serviceability; cracking; crack control; crack width limits; appearance; tightness; durability; bond; concrete cover; tension stiffening; deflection; span-depth ratio; long-term deformations; fib Model Code 2010] Issue 2 99–123

bridge pier; ultra-high-strength fibre-reinforced concrete; precast formwork] Issue 3 278–290
Bigaj-van Vliet, Agnieszka;
Vrouwenvelder, Ton: Reliability in the performance-based concept of fib Model Code 2010 [concrete structures; design and assessment; fib Model Code 2010; performance-based approach; performance requirements; reliability management]
Issue 4 309–319

Corres-Peiretti, Hugo: Sound engineering through conceptual design according to the fib Model Code 2010 [conceptual design; fib Model Code 2010; concrete structures]
Issue 2 89–98

Helland, Steinar: Design for service life: implementation of fib Model Code 2010 rules in the operational code ISO 16204 [fib Model Code 2010; ISO 16204; service life design]
Issue 1 10–18

Isaacs, Ben; Lark, Robert; Jeffer son, Tony; Davies, Robert; Dunn, Simon: Crack healing of cementitious materials using shrinkable polymer tendons [crack closure; autogenous healing; durability; polymer tendons]
Issue 2 138–147

Iskhakov, Iakov; Ribukov, Yuri: Two-layer concrete bridge beams as composite elements [high-performance concrete element; high-strength concrete; bridge beams; fibre-reinforced concrete]
Issue 3 271–277

Lee, Tai-Kuang; Chen, Cheng-Cheng; Pan, Austin D.E.; Hsue, Kai-Yuan; Tsai, Wei-Ming; Hwa, Ken: Experimental evaluation of large circular RC columns under pure compression [reinforced concrete; circular column; spiral; circular tie]
Issue 1 60–68

Muttoni, Aurelio; Luardi, Franco; Fernández Ruíz, Miguel: Concrete shells – towards efficient structures: construction of an ellipsoidal concrete shell in Switzerland [shell; concrete structure; design; sprayed concrete; fibre-reinforced concrete; architecture]
Issue 1 43–50

Müller, Harald S.; Anders, Isabel; Breiner, Raphael; Vogel, Michael: Concrete: treatment of types and properties in fib Model Code 2010 [fib; Model Code 2010; structural concrete; concrete properties; material models; creep and shrinkage; durability; service life design]
Issue 4 320–334

Pérez Caldentey, Alejandro; Corres Peiretti, Hugo; Peset Iribarren, Joan; Giraldo Soto, Alejandro: Cracking of RC members revisited: influence of cover, $\phi/p_{ef}$ and stirrup spacing – an experimental and theoretical study [cracking; $\phi/p_{ef}$; cover; influence of stirrups]
Issue 1 69–78

Sakai, Koji: Sustainability in fib Model Code 2010 and its future perspective [concrete; CO2; energy; fib Model Code 2010; resources; safety; sustainability]
Issue 4 301–308

Tailhan, Jean-Louis; Boulay, Claude; Rossi, Pierre; Le Maou, Fabrice; Martin, Eric: Compres sive, tensile and bending basic creep behaviours related to the same concrete [concrete; creep; compression; tension; bending]
Issue 2 124–130

Yamanobe, Shinichi; Saito, Kimo; Ichinomiya, Toshimichi; Kamimatsu, Yoshihisa: Bilateral loading experiment on and analysis of concrete piers using mortar-jointed ultra-high-strength fibre-reinforced concrete precast formwork [damage-free bridge pier; ultra-high-strength fibre-reinforced concrete; precast formwork]
Issue 3 278–290

Directives

Balázs, György L.; Bisch, Philippe; Borosnyói, Adorján; Burdet, Olivier; Burns, Clare; Ceroni, Francesca; Cervenka, Vladimir; Chiorino, Mario A.; Debernardi, Piergiorgio; Eckfeldt, Lars; El-Badry, Mamdouh; Fehling, Ekkehard; Foster, Stephen J.; Ghali, Amin; Gribniak, Viktor; Guiglia, Matteo; Kaklauskas, Gintarís; Lark, Robert J.; Lenkei, Peter; Lorrain, Michel; Marí, Antonio; Ozbolt, Josko; Pecce, Marisa; Pérez Caldentey, Alejandro; Taliano, Maurizio; Tkalcic, Damir; Torrenti, Jean Michel; Torres, Lluis; Toutlemonde, François; Ueda, Tamon; Vitek, Jan L.; Vráblík, Luká: Design for SLS according to fib Model Code 2010 [MC2010; SLS; serviceability; cracking; crack control; crack width limits; appearance; tightness; durability; bond; concrete cover; tension stiffening; deflection; span-depth ratio; long-term deformations; fib Model Code 2010]
Issue 2 99–123

Bigaj-van Vliet, Agnieszka;
Vrouwenvelder, Ton: Reliability in the performance-based concept of fib Model Code 2010 [concrete structures; design and assessment; fib Model Code 2010; performance-based approach; performance requirements; reliability management]
Issue 4 309–319

Clément, Thibault; Ramos, António Pinho; Fernández Ruíz, Miguel; Muttoni, Aurelio: Design for...
punching of prestressed concrete slabs [punching; flat slab; slab bridge; prestressing; in-plane forces; code predictions; Model Code 2010]  
Issue 2 157–167

di Prisco, Marco; Colombo, Matteo; Dozio, Daniele: Fibre-reinforced concrete in fib Model Code 2010: principles, models and test validation [fibre-reinforced concrete; constitutive equations; identification; modeling; structural characteristic length; structural behaviour; redundancy; structural design]  
Issue 4 342–361

Müller, Harald S.; Anders, Isabel; Breiner, Raphael; Vogel, Michael: Concrete: treatment of types and properties in fib Model Code 2010 [fib; Model Code 2010; structural concrete; concrete properties; material models; creep and shrinkage; durability; service life design]  
Issue 4 320–334

Sagaseta, Juan: The influence of aggregate fracture on the shear strength of reinforced concrete beams: an experimental and analytical research project [shear strength; aggregate interlock; high-performance concrete; strut-and-tie method; non-linear finite element analysis]  
Issue 4 401–414

Dynamic actions/earthquakes

Fardis, Michael N.: Performance- and displacement-based seismic design and assessment of concrete structures in fib Model Code 2010 [concrete structures; cyclic loading; displacement-based design; fib Model Code; performance-based design; seismic assessment; seismic design; seismic loading]  
Issue 3 215–229

Khazraijan, Najmeh; Liaqat, Gholam Hossein; Khodarahmi, Hossein: Normal impact of hard projectiles on concrete targets [perforation process; concrete structure; analytical model; hemispherical rigid projectile]  
Issue 2 176–183

Lu, Xilin; Yin, Xiaowei; Jiang, Huanjun: Restoring force model for steel reinforced concrete columns with high steel ratio [SRC; high ratio of encased steel; restoring force model; skeleton curve]  
Issue 4 415–422

Eurocode

Allaix, Diego Lorenzo; Carbone, Vincenzo Iliario; Mancini, Giuseppe: Global safety format for non-linear analysis of reinforced concrete structures [safety format; non-linear analysis; reinforced concrete structures; global resistance factors; Monte Carlo method]  
Issue 1 29–42

Fardis, Michael N.: Performance- and displacement-based seismic design and assessment of concrete structures in fib Model Code 2010 [concrete structures; cyclic loading; displacement-based design; fib Model Code; performance-based design; seismic assessment; seismic design; seismic loading]  
Issue 3 215–229

Sagaseta, Juan: The influence of aggregate fracture on the shear strength of reinforced concrete beams: an experimental and analytical research project [shear strength; aggregate interlock; high-performance concrete; strut-and-tie method; non-linear finite element analysis]  
Issue 4 401–414

Execution of construction works

Muttoni, Aurelio; Lurati, Franco; Fernández Ruiz, Miguel: Concrete shells – towards efficient structures: construction of an ellipsoidal concrete shell in Switzerland [shell; concrete structure; design; sprayed concrete; fibre-reinforced concrete; architecture]  
Issue 1 43–50

Sakai, Koji: Sustainability in fib Model Code 2010 and its future perspective [concrete; CO2; energy; fib Model Code 2010; resources; safety; sustainability]  
Issue 4 301–308

fib Model Code 2010

Bigaj-van Vliet, Agnieszka; Vrouwenvelder, Ton: Reliability in the performance-based concept of fib Model Code 2010 [concrete structures; design and assessment; fib Model Code 2010; performance-based approach; performance requirements; reliability management]  
Issue 4 309–319

di Prisco, Marco; Colombo, Matteo; Dozio, Daniele: Fibre-reinforced concrete in fib Model Code 2010: principles, models and test validation [fibre-reinforced concrete; constitutive equations; identification; modeling; structural characteristic length; structural behaviour; redundancy; structural design]  
Issue 4 342–361

Fardis, Michael N.: Performance- and displacement-based seismic design and assessment of concrete structures in fib Model
Annual table of contents 2013

Code 2010 [concrete structures; cyclic loading; displacement-based design; fib Model Code; performance-based design; seismic assessment; seismic design; seismic loading]

Matthews, Stuart; Bigaj-van Vliet, Agnieszka: Conservation of concrete structures according to fib Model Code 2010 [conservation; assessment; evaluation; condition control; intervention; fib Model Code 2010]

Muttoni, Aurelio; Ruiz, Miguel Fernández; Bentz, Evan; Foster, Stephen; Sigrist, Viktor: Background to fib Model Code 2010 shear provisions – part II: punching shear [fib Model Code 2010; punching shear; flat slabs; critical shear crack theory; level of approximation]

Randl, Norbert: Design recommendations for interface shear transfer in fib Model Code 2010 [interface shear; dowel action; bond; aggregate interlock]

Sagaseta, Juan: The influence of aggregate fracture on the shear strength of reinforced concrete beams: an experimental and analytical research project [shear strength; aggregate interlock; high-performance concrete; strut-and-tie method; non-linear finite element analysis]

Sakai, Koji: Sustainability in fib Model Code 2010 and its future perspective [concrete; CO2; energy; fib Model Code 2010; resources; safety; sustainability]

Sigrist, Viktor; Bentz, Evan; Ruiz, Miguel Fernández; Foster, Stephen; Muttoni, Aurelio: Background to the fib Model Code 2010 shear provisions – part I: beams and slabs [fib; Model Code; prestressed concrete; reinforced concrete; shear; design]

Silva, Ricardo; Faria, Duarte M. Vílula; Ramos, A. Pinho; Inácio, Micael: A physical approach for considering how anchorage head size influences the punching capacity of slabs strengthened with vertical steel bolts [punching; physical models; concrete crushing; anchorage; vertical steel bolts; strengthening; flat slabs]

Triantafilou, Thanasis; Matthis, Stijn: Fibre-reinforced polymer reinforcement enters fib Model Code 2010 [fibre-reinforced polymers; fib Model Code 2010; reinforcement; strengthening]

Walraven, Joost: fib Model Code for Concrete Structures 2010: mastering challenges and encountering new ones [concrete; structures; codes; recommendations; future developments; fib Model Code 2010]

Fire protection

Xiao, Jianzhuang; Fan, Yuhui; Tawana, M.M.: Residual compressive and flexural strength of a recycled aggregate concrete following elevated temperatures [recycled aggregate concrete (RAC); recycled coarse aggregates (RCAs); residual compressive strength; residual flexural strength; elevated temperature]

General

Allaix, Diego Lorenzo; Carbone, Vincenzo Ilario; Mancini, Giuseppe: Global safety format for non-linear analysis of reinforced concrete structures [safety format; non-linear analysis; reinforced concrete structures; global resistance factors; Monte Carlo method]

Cervenka, Vladimir: Reliability-based non-linear analysis according to fib Model Code 2010 [non-linear analysis; safety formats; reliability; fib Model Code 2010]

Corres-Peiretti, Hugo: Sound engineering through conceptual design according to the fib Model Code 2010 [conceptual design; fib Model Code 2010; concrete structures]

Khazraiyani, Najmeh; Liaghat, Gholam Hossein; Khodarahmi, Hossein: Normal impact of hard projectiles on concrete targets [perforation process; concrete structure; analytical model; hemispherical rigid projectile]

Matthews, Stuart; Bigaj-van Vliet, Agnieszka: Conservation of concrete structures according to fib Model Code 2010 [conservation; assessment; evaluation; condition control; intervention; fib Model Code 2010]

Ng, Tian Sing; Foster, Stephen J.: Development of a mix design methodology for high-performance geopolymer mortars [Geopolymer mortar; Fly ash; mix design; Compressive strength]

Seo, Tae-Seok; Kim, Jung-Chul: Behaviour of concrete in a stress continuity region after
cracking under restrained drying shrinkage [shrinkage; uniaxial restrained specimen; stress continuity region; bond analysis; effective tensile Young’s modulus]  
Walraven, Joost: fib Model Code for Concrete Structures 2010: mastering challenges and encountering new ones [concrete; structures; codes; recommendations; future developments; fib Model Code 2010]  

Guidelines  
Balázs, György L.; Bisch, Philippe; Borosnyói, Adorján; Burdet, Olivier; Burns, Clare; Ceroni, Francesca; Cervenka, Vladimir; Chiorino, Mario A.; Debernardi, Piergiorgio; Eckfeldt, Lars; El-Badry, Mamdouh; Fehling, Ekkehard; Foster, Stephen J.; Ghali, Amin; Grbišak, Viktor; Guiglia, Matteo; Kaklauskas, Gintaris; Lark, Robert J.; Lenkei, Peter; Lorrain, Michel; Marf, Antonio; Ozbolt, Josko; Pecce, Marisa; Pérez Caldentey, Alejandro; Taliano, Maurizio; Tkalcic, Damir; Torrenti, Jean Michel; Torres, Lluis; Toutlemonde, François; Ueda, Tumon; Vitek, Jan L.; Vráblík, Luká: Design for SLS according to fib Model Code 2010 [MC2010; SLS; serviceability; cracking; crack control; crack width limits; appearance; tightness; durability; bond; concrete cover; tension stiffening; deflection; span-depth ratio; long-term deformations; fib Model Code 2010]  
Bigaj-van Vliet, Agnieszka; Vrouwenvelder, Ton: Reliability in the performance-based concept of fib Model Code 2010 [concrete structures; design and assessment; fib Model Code 2010; performance-based approach; performance requirements; reliability management]  
Clément, Thibault; Ramos, António Pinho; Fernández Ruiz, Miguel; Muttoni, Aurelio: Design for punching of prestressed concrete slabs [punching; flat slab; slab bridge; prestressing; in-plane forces; code predictions; fib Model Code 2010]  
di Prisco, Marco; Colombo, Matteo; Dozio, Daniele: Fibre-reinforced concrete in fib Model Code 2010: principles, models and test validation [fibre-reinforced concrete; constitutive equations; identification; model- 

Prestressed concrete  
Ayoub, Essam; Malek, Charles; Helmy, Gamal: Highlights of the design and construction of a 12 km elevated APM bridge project in Saudi Arabia [precast construction; bridges; prestressing; stress analysis; unsymmetrical beam; box girder; curved structure]  
Belletti, Beatrice; Damoni, Cecilia; den Uijl, Joop A.; Hendriks, Max A. N.; Walraven, Joost C.: Shear resistance evaluation of prestressed concrete bridge beams: fib Model Code 2010 guidelines for level IV approximations [shear resistance; safety levels; non-linear finite element analyses; prestressed beams; guidelines]  
Clément, Thibault; Ramos, António Pinho; Fernández Ruiz, Miguel; Muttoni, Aurelio: Design for punching of prestressed concrete slabs [punching; flat slab; slab bridge; prestressing; in-plane forces; code predictions; fib Model Code 2010]  

Regulations  
Balázs, György L.; Bisch, Philippe; Borosnyói, Adorján; Burdet, Olivier; Burns, Clare; Ceroni, Francesca; Cervenka, Vladimir; Chiorino, Mario A.; Debernardi,
<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Issue/Start-End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piergiorgio; Eckfeldt, Lars; El-Badry, Mamdouh; Fehling, Ekkehard; Foster, Stephen J.; Ghali, Amin; Gribniak, Viktor; Guiglia, Matteo; Kaklauskas, Gintaris; Lark, Robert J.; Lenkei, Peter; Lorrain, Michel; Mari, Antonio; Ozbolt, Josko; Pece, Marisa; Pérez Caldentey, Alejandro; Taliano, Maurizio; Tkalcic, Damir; Torrenti, Jean Michel; Torres, Luis; Toutlemonde, François; Ueda, Tamon; Vitek, Jan L.; Vráblík, Luká</td>
<td>Design for SLS according to fib Model Code 2010</td>
<td>Issue 2 99–123</td>
</tr>
<tr>
<td>Bigaj-van Vliet, Agnieszka; Vrouwenvelder, Ton</td>
<td>Reliability in the performance-based concept of fib Model Code 2010</td>
<td>Issue 4 309–319</td>
</tr>
<tr>
<td>Clément, Thibault; Ramos, António Pinho; Fernández Ruiz, Miguel; Muttoni, Aurelio</td>
<td>Design for punching of prestressed concrete slabs</td>
<td>Issue 2 157–167</td>
</tr>
<tr>
<td>di Prisco, Marco; Colombo, Matteo; Dozio, Daniele</td>
<td>Fibre-reinforced concrete in fib Model Code 2010: principles, models and test validation</td>
<td>Issue 4 342–361</td>
</tr>
<tr>
<td>Müller, Harald S.; Anders, Isabel; Breiner, Raphae; Vogel, Michael</td>
<td>Concrete: treatment of types and properties in fib Model Code 2010</td>
<td>Issue 4 320–334</td>
</tr>
<tr>
<td>Sagaseta, Juan</td>
<td>The influence of aggregate fracture on the shear strength of reinforced concrete beams: an experimental and analytical research project</td>
<td>Issue 4 401–414</td>
</tr>
<tr>
<td>Ahmad, Syed Ishtiaq; Tanabe, Tada-aki</td>
<td>Three-dimensional FE analysis of reinforced concrete structures using the lattice equivalent continuum method</td>
<td>Issue 1 51–59</td>
</tr>
<tr>
<td>Pérez Caldentey, Alejandro; Corres Peiretti, Hugo; Peset Iribarren, Joan; Giraldo Soto, Alejandro</td>
<td>Cracking of RC members revisited: influence of cover, ϕ/ρ_s,ef and stirrup spacing – an experimental and theoretical study</td>
<td>Issue 1 69–78</td>
</tr>
<tr>
<td>Phan, Thanh Song; Tailhan, Jean-Louis; Rossi, Pierre</td>
<td>3D numerical modelling of concrete structural element reinforced with ribbed flat steel rebars</td>
<td>Issue 4 378–388</td>
</tr>
<tr>
<td>Triantafillou, Thanasis; Matthys, Stijn</td>
<td>Fibre-reinforced polymer reinforcement enters fib Model Code 2010</td>
<td>Issue 4 335–341</td>
</tr>
<tr>
<td>Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balázs, György L.; Bisch, Philippe; Borosnýói, Adorján; Burdet, Olivier; Burns, Clare; Ceroni, Francesca; Cervenko, Vladimir; Chiorino, Mario A.; Debernardi, Piergiorgio; Eckfeldt, Lars; El-Badry, Mamdouh; Fehling, Ekkehard; Foster, Stephen J.; Ghali, Amin; Gribniak, Viktor; Guiglia, Matteo; Kaklauskas, Gintaris; Lark, Robert J.; Lenkei, Peter; Lorrain, Michel; Mari, Antonio; Ozbolt, Josko; Pece, Marisa; Pérez Caldentey, Alejandro; Taliano, Maurizio; Tkalcic, Damir; Torrenti, Jean Michel; Torres, Luis; Toutlemonde, François; Ueda, Tamon; Vitek, Jan L.; Vráblík, Luká</td>
<td>Design for SLS according to fib Model Code 2010</td>
<td>Issue 2 99–123</td>
</tr>
</tbody>
</table>

www.ernst-und-sohn.de

Structural Concrete 14
cept of fib Model Code 2010
[concrete structures; design and assessment; fib Model Code 2010; performance-based approach; performance requirements; reliability management] Issue 4 309–319

Clément, Thibault; Ramos, António Pinho; Fernández Ruiz, Miguel; Muttoni, Aurelio: Design for punching of prestressed concrete slabs [punching; flat slab; slab bridge; prestressing; in-plane forces; code predictions; Model Code 2010]
Issue 2 157–167

di Prisco, Marco; Colombo, Matteo; Dozio, Daniele: Fibre-reinforced concrete in fib Model Code 2010: principles, models and test validation [fibre-reinforced concrete; constitutive equations; identification; modelling; structural characteristic length; structural behaviour; redundancy; structural design] Issue 4 342–361

Müller, Harald S.; Anders, Isabel; Breiner, Raphael; Vogel, Michael: Concrete: treatment of types and properties in fib Model Code 2010 [fib; Model Code 2010; structural concrete; concrete properties; material models; creep and shrinkage; durability; service life design] Issue 4 320–334

Sagaseta, Juan: The influence of aggregate fracture on the shear strength of reinforced concrete beams: an experimental and analytical research project [shear strength; aggregate interlock; high-performance concrete; strut-and-tie method; non-linear finite element analysis] Issue 4 401–414

Standards, regulations, guidelines, directives

Belletti, Beatrice; Damoni, Cecilia; den Uijl, Joop A.; Hendriks, Max A. N.; Walraven, Joost C.: Shear resistance evaluation of prestressed concrete bridge beams: fib Model Code 2010 guidelines for level IV approximations [shear resistance; safety levels; non-linear finite element analyses; prestressed beams; guidelines] Issue 3 242–249

Cervenka, Vladimir: Reliability-based non-linear analysis according to fib Model Code 2010 [non-linear analysis; safety formats; reliability; fib Model Code 2010]
Issue 1 19–28


Lee, Tai-Kuang; Chen, Cheng-Cheng; Pan, Austin D.E.; Hsiue, Kai-Yuan; Tsai, Wei-Ming; Hwa, Ken: Experimental evaluation of large circular RC columns under pure compression [reinforced concrete; circular column; spiral; circular tie] Issue 1 60–68

Muttoni, Aurelio; Ruiz, Miguel Fernández; Bentz, Evan; Foster, Stephen; Sigrist, Viktor: Background to fib Model Code 2010 shear provisions – part II: punching shear [fib Model Code 2010; punching shear; flat slabs; critical shear crack theory; level of approximation] Issue 3 204–214

Sigrist, Viktor; Bentz, Evan; Ruiz, Miguel Fernández; Foster, Stephen; Muttoni, Aurelio: Background to the fib Model Code 2010 shear provisions – part I: beams and slabs [fib; Model Code; prestressed concrete; reinforced concrete; shear; design] Issue 3 195–203

Walraven, Joost: fib Model Code for Concrete Structures 2010: mastering challenges and encountering new ones [concrete; structures; codes; recommendations; future developments; fib Model Code 2010] Issue 1 3–9

Testing/experiments

Isaacs, Ben; Lark, Robert; Jefferson, Tony; Davies, Robert; Dunn, Simon: Crack healing of cementitious materials using shrinkable polymer tendons [crack closure; autogenous healing; durability; polymer tendons] Issue 2 138–147

Lee, Tai-Kuang; Chen, Cheng-Cheng; Pan, Austin D.E.; Hsiue, Kai-Yuan; Tsai, Wei-Ming; Hwa, Ken: Experimental evaluation of large circular RC columns under pure compression [reinforced concrete; circular column; spiral; circular tie] Issue 1 60–68

Lu, Xilin; Yin, Xiaowei; Jiang, Huanjun: Restoring force model for steel reinforced concrete columns with high steel ratio [SRC; high ratio of encased steel;
restoring force model; skeleton curve]

Pérez Caldentey, Alejandro; Corres Peiretti, Hugo; Peset Iribarren, Joan; Giraldo Soto, Alejandro: Cracking of RC members revisited: influence of cover, $\phi/\rho_{s,ef}$ and stirrup spacing – an experimental and theoretical study [cracking; $\phi/\rho_{s,ef}$; cover; influence of stirrups] Issue 4 415–422

Randl, Norbert: Design recommendations for interface shear transfer in fib Model Code 2010 [interface shear; dowel action; bond; aggregate interlock] Issue 3 230–241

Sagaseta, Juan: The influence of aggregate fracture on the shear strength of reinforced concrete beams: an experimental and analytical research project [shear strength; aggregate interlock; high-performance concrete; strut-and-tie method; non-linear finite element analysis] Issue 4 401–414

Seo, Tae-Seok; Kim, Jung-Chul: Behaviour of concrete in a stress continuity region after cracking under restrained drying shrinkage [shrinkage; uniaxial restrained specimen; stress continuity region; bond analysis; effective tensile Young’s modulus] Issue 2 131–137

Silva, Ricardo; Faria, Duarte M. Vúla; Ramos, A. Pinho; Inácio, Micael: A physical approach for considering how anchorage head size influences the punching capacity of slabs strengthened with vertical steel bolts [punching; physical models; concrete crushing; anchorage; vertical steel bolts; strengthening; flat slabs] Issue 4 389–400

Xiao, Jianzhuang; Fan, Yuhui; Tawana, M.M.: Residual compressive and flexural strength of a recycled aggregate concrete following elevated temperatures [recycled aggregate concrete (RAC); recycled coarse aggregates (RCAs); residual compressive strength; residual flexural strength; elevated temperature] Issue 2 168–175

Yamanobe, Shinichi; Saito, Kimio; Ichinomiya, Toshimichi; Kamitsu, Yoshihisa: Bilateral loading experiment on and analysis of concrete piers using mortar-jointed ultra-high-strength fibre-reinforced concrete precast formwork [damage-free bridge pier; ultra-high-strength fibre-reinforced concrete; precast formwork] Issue 3 278–290

Zanuy, Carlos; Curbach, Manfred; Lindorf, Alexander: Finite element study of bond strength between concrete and reinforcement under uneven confinement condition [bond; confinement; finite element analysis; pull-out test; transverse tension] Issue 3 260–270
**Archive Your Journals as Books**

Order book covers to archive and protect your Ernst & Sohn periodicals for long-term use. Convert 4, 6 or 12 individual issues into a compact reference volume of standardised A4 size.

Our book covers are made of high-quality cloth binding with embossed lettering. You can also differentiate journals by the colour of the cover.

We deliver the book covers; you have them bound at a local book binder of your choice.

---

**Reply by Fax to:** +49 (0)30 47031 240  
**Order by phone:** +49 (0)800 1800 536

Please send us book covers for the following journals:

- for 2013 volumes only
- for subscription starting with 2013 volumes

<table>
<thead>
<tr>
<th>Title</th>
<th>Order No.</th>
<th>Volume 2013 - quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bauphysik</td>
<td>609413</td>
<td></td>
</tr>
<tr>
<td>Bautechnik</td>
<td>609113</td>
<td></td>
</tr>
<tr>
<td>Beton- und Stahlbetonbau</td>
<td>609313</td>
<td></td>
</tr>
<tr>
<td>Geomechanics and Tunneling</td>
<td>647813</td>
<td></td>
</tr>
<tr>
<td>geotechnik</td>
<td>653413</td>
<td></td>
</tr>
<tr>
<td>Mauerwerk</td>
<td>611613</td>
<td></td>
</tr>
<tr>
<td>Mining Report</td>
<td>629913</td>
<td></td>
</tr>
<tr>
<td>Stahlbau</td>
<td>609213</td>
<td></td>
</tr>
<tr>
<td>Steel Construction</td>
<td>648913</td>
<td></td>
</tr>
<tr>
<td>Structural Concrete</td>
<td>608413</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>x 29,00 €</td>
</tr>
</tbody>
</table>

Total

**Address:**

- **privat**
- **business**

- **Company**
- **Contact**
- **Street / No.**
- **Zip Code / City**

**Customer ID:**

- **VAT No.**
- **Phone**
- **Fax**
- **email**

Customer guarantee: This order may be revoked within two weeks by giving written notice to: Verlag Ernst & Sohn, Wiley-VCH, Boschstr. 12, D-69469 Weinheim.

**Date / Signature**