



European Mortar Industry Organisation

European Norms on designed mortars

Following is a list of existing standards concerning factory-made designed mortars.
The CEN technical committees prepare these European Norms, with the participation of experts from EMO.

There are two types of norms:

- ▲ “definitions and specifications” on products based on the performance concept,
- ▲ test methods on their relevant properties and characteristics.

Their status is indicated by abbreviations.

| State | | |
|------------|---------------------------------|-----------|
| D | Draft | prEN(*) |
| PE | Public enquiry | prEN |
| FV | under Formal vote | EN |
| UAP | under Unique approval procedure | EN |
| A | Approved and/or published | EN or hEN |
| R | Ratified for CE marking | hEN |

- ▲ **Rendering and plastering mortars**
- ▲ **Bedding and pointing mortars for masonry**
- ▲ **Tile fixing mortars**
- ▲ **Flooring mortars and screeds**
- ▲ **Technical mortars for concrete repair and protection**
- ▲ **External Thermal Insulation Composite Systems**

CEN: European Committee for Normalisation

EMO: European Mortar industry Organisation

hEN: harmonised product standard including Annex Z for obligatory CE marking (Construction Products Directive 89/106/EEC)

| Masonry, rendering and plastering mortars | | | |
|---|--|--------------------------|-------|
| Reference | Title | Dated | State |
| hEN 998-1 | Definitions and specifications for mortar for masonry. Rendering and plastering mortars | October 2002 | A |
| hEN 998-2 | Definitions and specifications for mortar for masonry. Bedding and pointing mortars for masonry | October 2002 | A |
| EN 1015-1 | Methods of test for mortar for masonry. Determination of particle size distribution by sieve analysis | January 1998 | A |
| EN 1015-2 | Methods of test for mortar for masonry. Bulk sampling of mortars and preparation of mortars | December 1997 | A |
| EN 1015-3 | Methods of test for mortar for masonry. Determination of consistence of fresh mortar by flow table | January 1998 | A |
| EN 1015-6 | Methods of test for mortar for masonry. Determination of bulk density of fresh mortar | January 1998 | A |
| EN 1015-7 | Methods of test for mortar for masonry. Determination of air content of fresh mortar | January 1998 | A |
| EN 1015-8 | Methods of test for mortar for masonry. Determination of water retentivity of fresh mortar | April 1998 | A |
| EN 1015-9 | Methods of test for mortar for masonry. Determination of workable life and correction time of fresh mortar | July 1999 | A |
| EN 1015-10 | Methods of test for mortar for masonry. Determination of dry bulk density of hardened mortar | July 1999 | A |
| EN 1015-11 | Methods of test for mortar for masonry. Determination of flexural and compressive strength of hardened mortar | July 1999 | A |
| EN 1015-12 | Methods of test for mortar for masonry. Determination of adhesive strength of hardened rendering and plastering mortars on substrates | December 1999 | A |
| <i>prEN 1015-14</i> | <i>Methods of test for mortar for masonry. Determination of durability by sulphate resistance of masonry mortar</i> | <i>Work Item deleted</i> | - |
| EN 1015-17 | Methods of test for mortar for masonry. Determination of water soluble chloride content of fresh mortar | February 2000 | A |
| EN 1015-18 | Methods of test for mortar for masonry. Determination of water absorption coefficient due to capillary action | December 2002 | A |
| EN 1015-19 | Methods of test for mortar for masonry. Determination for water vapour permeability of hardened rendering and plastering mortars | February 1998 | A |

| | | | |
|----------------------------|---|--------------------------------|--------------|
| EN 1015-21 | Test methods for One-Coat rendering mortars. Compatibility with backgrounds through assessment of adhesive strength and water permeability after conditionings | September 2001 | FV |
| EN 1745 | Masonry and masonry products. Methods of determining design thermal values | June 1998 | FV |
| hEN 12860 | Gypsum based adhesives for gypsum blocks Definitions, requirements and test methods | November 2001 | R |
| hEN 13279-1 | Gypsum binders and gypsum plasters - Part 1 Definitions and requirements | February 2002 | FV |
| EN 13279-2 | Gypsum binders and gypsum plasters - Part 2 Test methods | May 2003 | A |
| EN 13501-1 | Fire classification of construction products Classification using test data from reaction to fire tests | October 2001 | FV |
| prEN 14496 | Gypsum based adhesives for composite panels and plasterboards Definitions, requirements and test methods | November 2003 | FV |
| prEN 13963 | Jointing mortars for gypsum plasterboards Definitions, requirements and test methods | November 2003 | FV |
| Tile fixing mortars | | | |
| Reference | Title | Dated | State |
| hEN 12004 | Adhesives for tiles. Definitions and specifications | November 2001 with annex Z | A A |
| EN 1308 | Adhesives for tiles. Determination of slip resistance | December 1996 | A |
| EN 1323 | Adhesives for tiles. Concrete slab for tests | December 1996 | A |
| EN 1324 | Adhesives for tiles. Determination of shear adhesion strength of dispersion adhesives | December 1996 | A |
| EN 1346 | Adhesives for tiles. Determination of open time | December 1996 | A |
| EN 1347 | Adhesives for tiles. Determination of wetting capability | December 1996 | A |
| EN 1348 | Adhesives for tiles. Determination of tensile adhesion strength for cementitious adhesives | February 1997 | A |
| EN 12002 | Adhesives and grouts for tiles. Determination of transverse deformation for cementitious adhesives and grouts | March 1997 Revised Nov 2002 | A |
| EN 12003 | Adhesives for tiles. Determination of shear adhesion strength of reaction resin adhesives | March 1997 | A |

| | | | |
|-------------------------|--|---------------|--------------|
| EN 12808-1 | Adhesives and grouts for tiles. Determination of chemical resistance of reaction resin mortars | November 1998 | A |
| EN 13888 | Grouts for tiles. Definitions and specifications | June 2002 | A |
| EN 12808-2 | Grouts for tiles. Determination of resistance to abrasion | November 2001 | A |
| EN 12808-3 | Grouts for tiles. Determination of shrinkage | November 2001 | A |
| EN12808-4 | Grouts for tiles. Determination of flexural and compressive strength | November 2001 | A |
| EN 12808-5 | Grouts for tiles. Determination of water absorption | November 2001 | A |
| EN 1067 | Adhesives Examination and sampling for testing | August 1997 | A |
| prEN XX | Liquid waterproofing membranes for use beneath ceramic tiles Test methods | July 2000 | D |
| Flooring mortars | | | |
| Reference | Title | Dated | State |
| EN 13318 | Definitions and terminology (in 3 languages) Screed materials and floor screeds | June 2000 | A |
| hEN 13454-1 | Binders, composite binders and factory made mixtures for floor screeds based on calcium sulfate - Part 1 Definitions and requirements | February 2002 | FV |
| EN 13454-2 | Binders and composite binders for floor screeds based on calcium sulfate Test methods | June 2003 | A |
| hEN 13813 | Screed materials and floor screeds - Screed materials - Properties and requirements | August 2002 | A |
| prEN 13892-1 | Method of test for flooring mortars and screeds. Sampling, making and curing specimens for test | August 2002 | A |
| prEN 13892-2 | Method of test for flooring mortars and screeds. Determination of flexural and compressive strength | August 2002 | A |
| prEN 13892-3 | Method of test for flooring mortars and screeds. Determination of wear resistance (Böhme test). | August 2002 | A |
| prEN 13892-4 | Method of test for flooring mortars and screeds. Determination of wear resistance (BCA test) | August 2002 | A |
| prEN 13892-5 | Method of test for flooring mortars and screeds. Determination of wear resistance to rolling wheel for wearing layer. | June 2003 | A |

| | | | |
|---|--|----------------|--------------|
| prEN 13892-6 | Method of test for flooring mortars and screeds. Determination of surface hardness. | August 2002 | A |
| prEN 13892-7 | Method of test for flooring mortars and screeds Determination of wear resistance to rolling wheel for floor coverings. | June 2003 | A |
| prEN 13892-8 | Method of test for flooring mortars and screeds Determination of tensile strength | August 2002 | A |
| EN 14016-1 | Binders for magnesite screeds Definitions and requirements | July 2003 | A |
| EN 14016-2 | Binders for magnesite screeds Test methods | July 2003 | A |
| EN 13409 | Method of test for floor smoothing and levelling mortars Determination of setting time | 2001 | A |
| prEN (17 N) | Method of test for floor smoothing and levelling mortars Standard mixing procedures | March 1994 | D |
| prEN (N 62) | Method of test for floor smoothing and levelling mortars Determination of flexural and compressive strength | February 1998 | PE |
| prEN (N 37) | Method of test for floor smoothing and levelling mortars Determination of dimensional change | February 1998 | PE |
| prEN 12706 | Method of test for floor smoothing and levelling mortars Determination of flow characteristics | February 1998 | PE |
| Mortars for concrete repair and protection | | | |
| Reference | Title | Dated | State |
| EN 1504-1 | Products and systems for the protection and repair of concrete structures. Definitions | January 1998 | A |
| prhEN 1504-2 | Products and systems for the protection and repair of concrete structures - Definitions, Requirements, Quality control and evaluation of conformity - Part 2: Surface protection systems | September 2000 | PE |
| prhEN 1504-3 | Products and systems for the protection and repair of concrete structures - Definitions, Requirements, Quality control and evaluation of conformity - Part 3: Structural and not structural repair | September 2000 | PE |
| prhEN 1504-4 | Products and systems for the protection and repair of concrete structures - Definitions, Requirements, Quality control and evaluation of conformity - Part 4: Structural bonding | October 2000 | PE |
| prhEN 1504-5 | Products and systems for the protection and repair of concrete structures - Definitions, Requirements, Quality control and evaluation of conformity - Part 5: Injections | April 2002 | PE |
| prEN 1504-6 | Products and systems for the protection and repair of concrete structures - Definitions, Requirements, Quality control and evaluation of conformity - Part 6: Anchoring | October 2003 | D |
| prEN 1504-7 | Products and systems for the protection and repair of concrete structures. Reinforcement corrosion protection –Definitions and specifications | October 2003 | D |

| | | | |
|--------------|---|-----------------------------|-----|
| prhEN 1504-8 | Products and systems for the protection and repair of concrete structures. Quality control and evaluation of conformity | December 2003 | FV |
| ENV 1504-9 | Products and systems for the protection and repair of concrete structures. General principles for the use of products and systems | August 1997 | A |
| EN 1504-10 | Products and systems for the protection and repair of concrete structures. Site application of products and systems, Quality control works | February 2003 | A |
| EN 1542 | Products and systems for the protection and repair of concrete structures. Pull-off test method | March 1999 | A |
| EN 1543 | Products and systems for the protection and repair of concrete structures Determination of tensile strength for polymers | December 1997 | A |
| prEN 1544 | Products and systems for the protection and repair of concrete structures Test method – creep under tensile strength | January 2003 (Revision) | PE |
| EN 1766 | Products and systems for the protection and repair of concrete structures Concrete reference or mortar | July 1999 | A |
| EN 1767 | Infrared analysis | May 1999 | A |
| EN 1770 | Products and systems for the protection and repair of concrete structures Determination of coefficient of thermal expansion | February 1998 | A |
| prEN 1771 | Products and systems for the protection and repair of concrete structures Determination of injectability and splitting | December 2003 | UAP |
| EN 1799 | Products and systems for the protection and repair of concrete structures Determination of suitability of structural bonding | November 1998 | A |
| EN 1877-1 | Epoxide equivalent | May 2000 | A |
| EN 1877-2 | Amine function | May 2000 | A |
| prEN 1881 | Products and systems for the protection and repair of concrete structures. Test method. – Pull-off test of rebar | March 2003-12 (Revision) | PE |
| EN 12188 | Products and systems for the protection and repair of concrete structures Structural adhesives - Test method - Adhesion steel to steel | April 1999 | A |
| EN 12189 | Products and systems for the protection and repair of concrete structures Structural adhesives - Test method – Determination of open time | April 1999 | A |
| EN 12190 | Products and systems for the protection and repair of concrete structures Determination of compressive strength | October 1998 | A |
| EN 12192-1 | Products and systems for the protection and repair of concrete structures. Test method. Granulometry | January 2002 | A |
| EN 12192-2 | Products and systems for the protection and repair of concrete structures. Test method. Granulometry size grading for fillers for polymer agents | April 1999 | A |
| EN 12614 | Products and systems for the protection and repair of concrete structures. Test method. Glass transition temperatures | December 2003 | UAP |

| | | | |
|--------------|---|---------------|-----|
| EN 12615 | Products and systems for the protection and repair of concrete structures Structural adhesives - Test method -Slant shear strength | April 1999 | A |
| EN 12617-1 | Products and systems for the protection and repair of concrete structures. Test method. Linear shrinkage | March 2003 | A |
| EN 12617-2 | Products and systems for the protection and repair of concrete structures. Test method. Volumetric shrinkage | December 2003 | UAP |
| EN 12617-3 | Products and systems for the protection and repair of concrete structures. Test method. Early age linear shrinkage | January 2002 | A |
| EN 12617-4 | Products and systems for the protection and repair of concrete structures. Test method. Determination of shrinkage and expansion (dimensional stability) | January 2002 | A |
| EN 12618-1 | Products and systems for the protection and repair of concrete structures. Test method. Elongation capacity of ductile injection products | May 2003 | A |
| EN 12618-2 | Products and systems for the protection and repair of concrete structures Determination of adhesion by tensile bond strength | December 2003 | UAP |
| EN 12618-3 | Products and systems for the protection and repair of concrete structures Determination of adhesion by slant shear strength | December 2003 | UAP |
| EN 12636 | Products and systems for the protection and repair of concrete structures Structural adhesives - Test method - Adhesion concrete to concrete | April 1999 | A |
| EN 12637-1 | Products and systems for the protection and repair of concrete structures. Test method. Compatibility with concrete | December 2003 | UAP |
| prEN 12637-3 | Products and systems for the protection and repair of concrete structures. Test method. Compatibility with elastomer | July 2003 | FV |
| EN 13057 | Products and systems for the protection and repair of concrete structures Test method- Determination of capillary water absorption | January 2002 | A |
| EN 13062 | Products and systems for the protection and repair of concrete structures. Test method. Determination of thixotropy | March 2003 | A |
| EN 13294 | Products and systems for the protection and repair of concrete structures. Test method. Determination of stiffening time | January 2002 | A |
| prEN 13295 | Products and systems for the protection and repair of concrete structures. Test method. Determination of carbonation resistance | August 2003 | FV |
| EN 13395-1/3 | Products and systems for the protection and repair of concrete structures Test method- Determination of workability (thixotropy, flow) | January 2002 | A |
| EN 13395-4 | Products and systems for the protection and repair of concrete structures Test method- Application overhead | January 2002 | A |
| prEN 13396 | Products and systems for the protection and repair of concrete structures. Test method. Determination of chloride ion ingress | August 2003 | FV |
| EN 13412 | Products and systems for the protection and repair of concrete structures. Test method. Determination of elasticity in compression | December 2001 | A |

| | | | |
|--------------|---|---------------|----|
| EN 13529 | Products and systems for the protection and repair of concrete structures. Test method. Determination of chemical resistance | August 2003 | A |
| prEN 13578 | Products and systems for the protection and repair of concrete structures. Test method. Determination of compatibility on wet concrete | July 2003 | FV |
| EN 13579 | Products and systems for the protection and repair of concrete structures. Test method. Dry test – Hydrophobic impregnation | December 2001 | A |
| EN 13580 | Products and systems for the protection and repair of concrete structures. Test method. – Water absorption and alkali resistance | December 2001 | A |
| EN 13581 | Products and systems for the protection and repair of concrete structures Test method- Loss of mass after freeze thaw salt stress | December 2001 | A |
| EN 13584 | Products and systems for the protection and repair of concrete structures Test method- Creep in compression | June 2003 | A |
| EN 13687-1/5 | Products and systems for the protection and repair of concrete structures Test method- Determination of thermal compatibility | December 2001 | A |
| EN 13733 | Products and systems for the protection and repair of concrete structures Determination of the durability of structural bonding | December 2001 | A |
| EN 13894-1 | Products and systems for the protection and repair of concrete structures Test method – Fatigue – Part 1 : during cure | July 2003 | A |
| EN 13894-2 | Products and systems for the protection and repair of concrete structures Test method – Fatigue – Part 2 : after hardening | July 2002 | A |
| prEN 14068 | Products and systems for the protection and repair of concrete structures Test method – Determination of watertightness | July 2003 | FV |
| prEN 14406 | Products and systems for the protection and repair of concrete structures Test method – Expansion ratio and expansion evolution | December 2003 | FV |
| prEN 14117 | Products and systems for the protection and repair of concrete structures Test method – Viscosity of cementitious injection products | December 2003 | FV |
| prEN 14497 | Products and systems for the protection and repair of concrete structures Test method – Filtration stability | December 2003 | FV |
| prEN 14498 | Products and systems for the protection and repair of concrete structures Test method – Volume and weight changes | December 2003 | FV |

| ETICS - External Thermal Insulation Composite Systems | | | |
|--|--|-------------------------------------|--------------|
| Reference | Title | Dated | State |
| ETAG 004 | EOTA - Guideline for European Technical Approval of External Thermal Insulation Composite Systems with mineral rendering mortars or organic coatings | Ratified for CE marking Feb 2002 | R |
| prEN 13499 | ETICS based on expanded polystyrene Definitions and specifications | October 2001 | PE |
| prEN 13500 | ETICS based on mineral wool. Definitions and specifications | October 2001 | PE |
| prEN 13494 | ETICS Determination of the tensile strength of the adhesive and the base-coat to the thermal insulation material | March 1999 | PE |
| prEN 13495 | ETICS Determination of the tensile resistance (foam block test) | March 1999 | PE |
| prEN 13496 | ETICS - Glass fibre meshes Determination of the glass fibre mesh properties | March 1999 | PE |
| prEN 13497 | ETICS Determination of the resistance to impact | March 1999 | PE |
| prEN 13498 | ETICS Determination of the resistance to penetration | March 1999 | PE |
| EN 13162 | Thermal insulation products Factory made mineral wool – Definitions and specifications | May 2000 | FV |
| EN 13163 | Thermal insulation products Factory made expanded polystyrene – Definitions and specifications | May 2000 | FV |
| EN 13172 | Thermal insulation products Evaluation of conformity | August 2000 | FV |