

CEMWELD

BONDING AGENT FOR PLASTER, STUCCO AND CONCRETE

DESCRIPTION

CEMWELD is an aqueous resin adhesive based polyvinyl acetate, for permanently bonding plaster, stucco and concrete to damp or dry concrete and masonry surfaces. **CEMWELD** develops minimum bonding strengths considerably in excess of 500 psi (3.4 MPa) and has a performance range of (-37°C) without bond failure.

FEATURES & ADVANTAGES

- Eliminates brown and scratch coats when plastering ceilings and columns.
- Film remains flexible and re-wettable up to 24 hours after application.
- Can be applied to either damp or dry surfaces.

BASIC USES

- Bonding the finish plaster coat or stucco to concrete or masonry surfaces.
- Bonding agent in the vertical and overhead applications
- May be used to bond new concrete to existing concrete (Note: Do not use **CEMWELD** in areas subjected to constant wet conditions such as swimming pools, tank linings, parking areas, etc.)
- Interior and dry applications

SPECIFICATIONS / COMPLIANCES

- **CEMWELD** is approved by the City of New York Board of Building Standards and Appeals Docket No. 155-60-SM
- **CEMWELD** is approved by the Cleveland Board of Building Standards & Appeals.
- **CEMWELD** meets ASTM C 1059-86, Standard Specifications for Latex Agents for Bonding Fresh to Hardened Concrete, Type I.

TECHNICAL INFORMATION

Typical Engineering Data

The following tensile strength test results are typical of those expected in using **CEMWELD** for the noted bonding applications:

Tensile Strength psi (MPa)

Material Bonded	Min. Req'd. Specification	Bonded Tacky	Bonded after 24 hrs. Aging
1:3 Perlite Plaster	MIL-B-19235		
Neat Moulding Plaster	150 (1.0)	270 (1.9)	243 (1.7)
1:3 Ottawa Sand Mortar	250 (1.7)	543 (3.7)	478 (3.3)
1:3 Gray Gypsum & Standard Sand Finish Plaster	200 (1.4)	197 (1.4)**	225 (1.5)
Concrete	60 (0.4)	475 (3.3)	225 (1.6)
ASTM C 1042-85	120 (0.8)	55 (.4)**	40 (.3)**
	-----	215(1.5)	183 (1.3)
	-----	615 (4.2)	750 (5.2)

**All tests in these series broke at the unbonded sections of the specimens indicating the bond was stronger than the plaster or the mortar.

Bond Strength @ 14 days

ASTM C 1042-85: 680 psi (4.7 MPa)

DIRECTIONS FOR USE

PLASTER APPLICATIONS:

Surface Preparation - **CEMWELD** must be applied to structurally sound surfaces which are clean and free from all loose and scaly materials. Do not use over water soluble calcimine paints or rusted surfaces. Remove any traces of dirt, dust, oil, grease or wax. Painted surfaces should be sanded to remove the gloss.

Mixing - When used in plaster applications, **CEMWELD** should be used as is from the container and requires no pre-mixing.

COVERAGE	Bonding plaster to new concrete surfaces	(m ² /liter)	10 to 12
	Bonding plaster of stucco repairs		7.5 to 10
	Bonding self-leveling underlayment		4.5 to 7.5
	Slurry bond coat		5 to 6
	PACKAGING	CEMWELD is packaged in 210 Liter drums and 20 Liter Pails.	
COLOR	Contact CMCI Tech Dept.		

Placement-CEMWELD should be applied by brush, roller or spray in one continuous unbroken film. Allow at least 30 to 40 minutes drying time, or until tacky to the touch, before applying the plaster. When making plaster repairs it is imperative that each coat of plaster be allowed to properly cure before the application of successive coats.

Finishing -Finish the plaster to the desired texture.

SLURRY COAT:

Surface Preparation-If using this product as a slurry bond coat for a traffic bearing topping, the concrete must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using a scabber, bushhammer, shotblast or scarifier which will give a surface profile of a minimum 3 mm and expose the coarse aggregate of the concrete.

NOTE: ACID ETCHING IS NOT ACCEPTABLE.

The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing. Allow the concrete surface to dry. Do not place slurry coat on standing water. All concrete must possess an open surface texture with all curing compounds and sealers removed.

Bonding -For bonding traffic bearing toppings with this product, CMCI strongly recommends using a slurry coat rather than using this product as a primer by itself. The slurry coat should be mixed as follows:

42.6 kg cement
11.4 liter CEMWELD
22.7 liter water

Coverage will be 56-74 m² for this quantity. Actual coverage highly depends upon the substrate profile.

After the surface has been prepared, prime all areas with a slurry coat before the topping is applied.

Mixing -Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. Add the appropriate amount of **CEMWELD** and water for the batch size and then add the cement. Mix for a minimum of 3 minutes. The mixed product should be quickly transported to the repair area and placed immediately.

PLACE THE TOPPING ON THE SLURRY COAT BEFORE IT DRIES OUT.

PRIMER FOR NON-TRAFFIC TOPPINGS:

Surface Preparation-See SLURRY COAT

Surface Preparation.

If using this product as a primer for FLORTOP, the above surface preparation is that which is recommended by CMCI. Acid etching is not acceptable

Mixing-CEMWELD MAY BE DILUTED WITH WATER BY SIMPLY MIXING ONE GALLON OF CEMWELD with one gal (3.8 liter) of water and agitating until the solution is uniform.

Placement-Broom or brush the primer into place. Allow to become surface dry before placing the underlayment.

NOTE: If the surface has not been appropriately sealed, a second application of the primer may be necessary.

The topping may be placed up to 4 hours after application of CEMWELD

CLEAN-UP

Clean tools and equipment with water before the material hardens.

PRECAUTIONS / LIMITATIONS

- CEMWELD should not be used where it will be subjected to constantly wet conditions or running water, such as in repair of swimming pools, sidewalks or parking ramps.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no warranty and or responsibility is assumed on the performance of work completion executed with use of our products.

"High Quality Construction Chemicals"
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