

Product Data Sheet

PRODUCT NAME:

Barrier-1 Admixture

Main Office:

Barrier-1 Inc
1901 Tumblewater Blvd.
Ocoee, Florida 34761
Ph: 407-484-2604
Fax: 407-656-8603
Email: [rick@barrier-1.com](mailto:ricker@barrier-1.com)

PRODUCT DESCRIPTION:

BASIC USE:

The primary use of Barrier-1 Admixture is for waterproofing new on-grade, below-grade or above grade concrete slabs.

ADVANTAGES:

Using Barrier-1 Admixture assures architects and flooring manufactures that flooring materials will not de-bond due to moisture migration or capillary action inside the slab.

COMPOSITION & MATERIAL

Barrier-1 Admixture reacts with water and portlandite filling the capillary system with calcium silicate hydrate (CSH). The route for moisture migration is eliminated.

Once Barrier-1 Admixture is added to the mix design it reacts with the water to allow the concrete to be flexible, even at low slump.

ENVIRONMENTAL CONSIDERATIONS

Barrier-1 Admixture is environmentally safe and contains no volatile organic compounds (VOCs). Barrier-1 Admixture contains an anti-microbial biocide to inhibit mold and bacteria growth.

PREPARATORY WORK

Handle and store product according to Barrier-1 recommendations. Barrier-1 Concrete Admixture should be used in all interior floor slabs unless noted otherwise. Maximum slump with water should not exceed 4 " (101.60 mm). Follow manufacturer's instructions for dispensing. Barrier-1 Admixture is added directly to the concrete mix design.

APPLICATION – FLOORING

Cracks, expansion joints and saw cuts should be cleaned out and vacuumed. Install backer rod and a quality one or two part polyurethane sealant.

Dispensing

Barrier-1 Admixture is added at the concrete batch plant or jobsite at a rate of 14oz (397 g) per 100 lbs. of cementitious materials. Additional dosage may be required for an increase in high early strength

benefits. The minimum amount is 50oz (1418 g) per cubic yard.

Truck or Plant Mixing

The accuracy of measurement of any admixture should be within plus or minus 3%. Two or more admixtures may be used in the same concrete batch, provided such admixtures are added separately and that the combination has no deleterious effect on the concrete.

Onsite Mixing

Add the Barrier-1 Concrete admixture to the concrete truck and let drum rotate for 7 minutes before discharge.

CURING & Concrete Placement

Barrier-1 recommends following established ACI guidelines for curing. Wet cure for three days.

Barrier -1 subscribes to American Concrete Institute Guidelines

PRECAUTIONS

A representative of Barrier-1 admixture manufacturer must be present at the jobsite during mixing and placement of the first batch of treated concrete. Contractor must not proceed without this representative being present for certification.

Use non-chlorinated additives such as accelerators, plasticizers and water reducing admixtures with Barrier-1 Admixture. Air entrainment is not needed. Retarders may be used when ambient temperatures exceed 75°F (24° C). Barrier-1 Admixture is used in lieu of a portion of the mix water, not in addition to the mix water. The water-to-cement ratio is critical. It is imperative to comply with the designed water-to-cement ratio. Use of plasticizers and/or water reducers is recommended to achieve slumps greater than 4".

STORAGE TEMPERATURE

Above 40 degrees, do not allow to freeze. Separation may occur under 40 degrees and thorough agitation will be required.

WARRANTY:

This admixture is formulated for the flooring industry and meets or exceeds all guidelines pertaining to moisture emission as established by the flooring industry. This admixture carries a standard manufacturer's construction warranty for five (5) years against moisture related failure, including all finish floor materials and labor. Contact manufacturer for more information on warranty condition, duration and remedies.

MAINTENANCE:

No Maintenance is required.

TECHNICAL SERVICES:

Trained service personnel offer design assistance and technical support. For technical assistance contact: Richard Koon, Barrier-1 407-484-2604, rakoon@att.net