

RedcoLite® Perlite Concrete Floorfill

A premium PERLITE product by
REDCO II

PRODUCT
INFORMATION
BULLETIN

203B

LightWeight Sound-Deadening Concrete (Wood Frame Construction)

MIXING AND PLACING

Lightweight concrete floors for sound control in wood frame construction have proved their effectiveness for many years. Excellent sound deadening lightweight concrete can be installed without special foaming equipment, from materials readily available at all building material dealers. For smaller jobs, materials can be job mixed and placed by any type of plaster or grout pump. Two typical mixes follow:

One common mix that will place and finish easily is as follows:

Plastic Cement	2 Sacks
RedcoLite Plaster or Concrete Aggregate	3 Cu.Ft.
Plaster or Concrete Sand	4 Cu.Ft. (28-30 Shovels)
Water	16-18 gallons

This concrete will have a dry density of about 90 pounds per cubic foot with a compressive strength of 1200 - 1500 psi (Hard rock concrete weighs 140 - 150 pounds per cubic feet). Yield of this batch will be 7 to 8 cubic feet, or 50 to 60 square feet laid to the thickness of a 2x4 plate (1½ inches).

For Retrofit applications (where a maximum of 70 lbs per cubic foot dry density is permissible), the following mix is suggested:

Plastic or Common Cement	1 bag
RedcoLite Plaster or Concrete Aggregate	2 Cu.Ft.
Polypropylene Fiber (15 denier, 3/8" long)	1½ Lbs.
Water	5-6 gallons

This mix will have a dry density of about 60 pounds per cubic foot, with a compressive strength of 1,800 - 2,000 psi. This mix should be placed a minimum of 1½" thick; and 30 minutes prior to pouring, a latex bonding agent should be used between the wood/felt and the concrete. Yield of this mix will be approximately 1¾ cubic feet, or 18 board feet (twelve square feet laid at a thickness of 1½").

Mixing instructions: For either mix, place required water in the mixer (a small amount may be withheld to the end of the mixing cycle to avoid excess water). Add the cement and mix until the slurry is uniform, approximately 1 minute; then add the perlite and the fiber, if appropriate. Mix until thoroughly blended, usually from 1½ to 2 minutes, but not longer than 4 minutes. Over-mixing can result in unnecessary loss of yield.

PREPARATION AND FINISHING

Framing:

Double plate construction is preferred because it provides backing above the lower plate for lath or dry wall after floor fill is in place. Provide single plate at all perimeter openings (doors, stairs, etc.). Provide single plate where carpet abuts another type of flooring material. It is good practice to provide a weakened plane joint at doors by means of a 2x4 plate or 1½ inch metal divider strip.

Other Trades:

All projections through the floor, (heater ducts, plumbing, electrical) must be in before concrete is placed. Any open vents or pipes near floor level should be sealed against spilled concrete.

Preparation:

Floors must be covered with approved kraft paper stapled in place and lapped to prevent leakage onto the sub floor.

Finishing:

Finish will be as specified by owner. Normally a steel float finish is satisfactory for carpet and pad, while a steel trowel finish is necessary under resilient or sheet flooring.

Up to 2% of Calcium Chloride may be used to accelerate finishing time.

CAUTION: Calcium Chloride may cause some corrosion in contact with galvanized steel.

Redco II welcomes inquiries on these other uses of RedcoLite Aggregate:

- Ultra lightweight concrete - density as low as 55 lbs per cubic foot
- One hour fire rated floor-ceiling assembly, wood frame
- 53 STC floor-ceiling assembly, wood frame
- RedcoLite Insulating Concrete over steel or concrete substrates
- RedcoLite Insulating Concrete for heated and unheated slabs on-grade
- Fire rated plaster assemblies, interior and exterior
- Soil amendment with Redco Horti-Perl Horticultural Perlite