

AccuRadiant®

Radiant Underlayment

Description and Benefits

The Ultimate in poured cementitious floor underlayment products.

- ✓ Ultimate radiant mass, evenly transfers heat, improves response time
- ✓ Designed specifically for radiant floor heating systems
- ✓ Can be poured over hot water tubes, electric heating cables or mats
- ✓ Smooth, non-combustible cementitious underlayment, specifically formulated to resist breakdown
- ✓ Adds to the acoustical performance of your home
- ✓ Stiffens the floor and eliminates squeaky floors and nail pops
- ✓ Seals perimeter walls, reducing baseboard drafts and air leaks
- ✓ Non-combustible, UL fire rated.

- ✓ **AccuRadiant®** Brand Floor Underlayment System is a fast applied, quick-setting cement formulated specifically for radiant floor heating applications.
- ✓ **AccuRadiant®** provides compressive strengths up to 4,000 psi, depending upon the mix design. Consult your local **AccuCrete®** contractor on how to best achieve the compressive strength required for your project.
- ✓ Non-shrinking and non-cracking **AccuRadiant®** holds your tubing or cable in place to reduce noise and chafing, while providing a beautiful surface ready for your ceramic tile, marble tile, or floor covering of your choice. The same sound and fire resistance qualities of **AccuCrete®** underlayment products make **AccuRadiant®** the safe choice for your radiant heat installation.
- ✓ **AccuRadiant®** Poured Underlayment System is batch mixed on the jobsite with sand and water providing a monolithic, smooth, lightweight floor.
- ✓ At minimum depth of 3/4" over the tubing or cables to a maximum of 3", typically 1 1/2", **AccuRadiant®** weighs 14.4 lbs. per sq. ft. and has a density of approximately 115 lbs per cu. ft.
- ✓ **AccuRadiant®** floor underlayment system provide a cost effective underlayment for residential, radiant heating, multi-family, commercial, institutional, as well as new and renovation type construction. Typical applications are designed to provide a 1 or 2-hour fire rated assembly and significantly improve sound ratings.

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Physical Properties

Color	Gray Powder
Flow Properties	Medium Flow w/ Self-Leveling Properties
Water Per Bag	4 to 5.5 US Gal. per 80 lb. bag
Sand Per Bag	1.4 to 1.8 ft ³ of washed mason or concrete sands meeting AccuLevel® / AccuCrete® minimum gradation criteria
Compressive Strength	(ASTM C472) up to 4,000 psi depending on mix design, sand gradation, and water content
Wet Density	110 to 120 lb./ ft ³
Recommended Thickness	3/4" over tubing or electric cables
Surface Burning Characteristics	ASTM E84 - Flame spread: 0, Fuel Contribution: 0, Smoke Density: 0
	Fire testing of construction products and materials ASTM E119 : Pass

Uses and Limitations

- ✓ No single application of **AccuRadiant®** Floor Underlayment should exceed 3" in depth. Consult your **AccuCrete®** contractors on how to achieve depths greater than 3".
- ✓ Any material poured above a crawl space must be protected by a vapor barrier.
- ✓ After installation of the **AccuRadiant®** Floor Underlayment and prior to the resumption of construction, place temporary wood planking over underlayment where heavy wheeled or concrete loads will occur.
- ✓ **AccuRadiant®** Floor Underlayment Systems are not designed to be installed on or below grade, except over well-drained structural substrates.
- ✓ The structural floor should be designed to withstand designed loads with a minimum deflection criteria of L/360.
- ✓ Unless otherwise stated, **AccuRadiant®** Floor Underlayment systems should not be used as a wearing surface.
- ✓ Unless otherwise stated, **AccuRadiant®** Floor Underlayment Systems should not be used for exterior applications or where they will come in prolonged contact with water.
- ✓ **AccuCrete®** is approved for use over concrete and new plywood or OSB. Other substrates and conditions may require special preparation. Consult the manufacturer before installation over other types of substrates.
- ✓ **AccuRadiant®** Floor Underlayment Systems are only one component of an effective floor-ceiling fire rated and sound rated assembly. Care must be taken in the installation of all construction components to assure the

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Installation

- ✓ The building must be fully enclosed, and a minimum temperature of 50°F must be maintained during the installation and for a period of 14 to 21 days (typical Drying period for a 1 1/2" application) after the installation of the **AccuRadiant®** Floor Underlayment System. The subfloor must be fine broom cleaned and free of all contaminants.
- ✓ Prior to pouring the **AccuRadiant®** Floor Underlayment, an **AccuCrete®** Priming System must be used. Adequate ventilation must be provided for a period of 14 to 21 days after installation of the underlayment to ensure drying of the underlayment. For thicker applications, a longer drying time may be necessary.
- ✓ The structural subfloor should be adequate to withstand designed loads with a minimum deflection criteria of L/360. Installations over concrete slabs require the concrete to be properly cured (typically 28 days) prior to the installation of the **AccuRadiant®** Floor Underlayment. Once the **AccuRadiant®** is fully dry and has passed a dryness test, the application of a surface sealer is recommended prior to the installation of all glue down or thin set finished flooring. All instructions or recommendations by the finished floor goods manufacturer supersede this recommendation.
- ✓ Wear a NIOSH approved dusk mask and/or provide ventilation when mixing the product.

UL Designs

G577 G578 G579 G580 G581 G582 J917 J919J920 J924 J927 J931 J957 J958
J966 J991J994 K906 L004 L005 L006 L201 L202 L206L208 L209 L210 L211
L212 L501 L502 L503L504 L505 L506 L507 L508 L509 L510 L511L512 L513
L514 L515 L516 L517 L518 L519L520 L522 L523 L524 L525 L526 L527
L528L529 L530 L533 L534 L535 L536 L537 L538L539 L540 L541 L542 L543
L546 L547 L549L550 L551 L552 L555 L556 L558 L560 L562L563 L570 L573
L574 L576 L583 L585 L590L592 L593 L599 M502 M503 M504 M506 M508
More designs may be obtained. Contact us at info@AccuCrete.com

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Submittal Approvals

Revised
06/13/2017

Minimum Compressive Strength: _____

Project Name: _____

Architect: _____

Date: ____/____/____

Contractor: _____

Date: ____/____/____

Notice: Arcosa Specialty Materials ("ACG") warrants that the AccuCrete® and AccuRadiant® products will conform to the written specifications stated by Arcosa Specialty at the time of its shipment by ACG. ACG's liability is limited to replacement of defective material, F.O.B./factory. Customers must promptly notify Arcosa Specialty of any alleged defects. Replacement of defective material will be made only upon ACG's inspection of the material. Because Arcosa Specialty does not install AccuCrete® or AccuRadiant®, it cannot be held responsible for the results of any installation. CUSTOMER DISCLAIMS AND Arcosa Specialty MAKES NO WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CUSTOMER WAIVES AND Arcosa Specialty SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES UNDER ANY THEORY OF LAW. NO REPRESENTATIVE OF Arcosa Specialty HAS THE AUTHORITY TO MAKE ANY REPRESENTATIONS OR PROMISES OF Arcosa Specialty EXCEPT AS STATED HEREIN. IN NO EVENT WILL ACG'S LIABILITY HERUNDER EXCEED THE PURCHASE PRICE OF THE DEFECTIVE MATERIAL.