

ECODUR 201R ROOF COATING TECHNICAL SHEET

PRODUCT OVERVIEW

Ecodur 201R is a gray ultra durable roof coating that is primarily intended for concrete applications. It self-levels with no maximum thickness during curing to create a smooth surface and hide substrate blemishes. Ecodur 201R is VOC-free, non-toxic, and made from sustainable materials. It can be used with a variety of topcoats for aesthetics, cooling, and customization.

INTENDED USAGE

Ecodur 201R Battleship Gray is primarily intended for concrete applications. For application over any other substrate, it is the contractor's responsibility to verify that the substrate is suitable for the heat created by dark-colored coatings. **WARNING:** *not approved for use on new roofs.*

PHYSICAL PROPERTIES AND PERFORMANCE CHARACTERISTICS

DURABILITY - ASTM C627: 16,000 passes of an average sized car. No debonding or deterioration

ESTIMATED TENSILE STRENGTH - ASTM D412: 900 PSI (6MPa)

PULL-OFF STRENGTH FROM STEEL - ASTM D4541: 1000 PSI with 95-100% cohesive

ESTIMATED ELONGATION - ASTM D412: 50-100%

HEAT RESISTANCE - CONTINUOUS: 212F / 100C

MINIMUM SERVICE TEMPERATURE: - 20 to - 40 F / - 30 to - 40 C

WATER ABSORPTION - ASTM D570: 0.3% - 30 g/m² @ 185F / 85C for 30 days.

PERM RATING - ASTM D1653: USA PERM rating of 5 PERMS for 0.030 to 0.050 inches thickness (30 to 50 mils)

UN-CURED PRODUCT PROPERTIES

MIX RATIO BY WEIGHT: 83 parts catalyst (part A) 17 parts resin (part B)

MIX RATIO BY VOLUME: 4.25:1 A:B (volume measurements are subject to variations during mixing and stirring that may entrain air)

POT LIFE: Less than 45 minutes. Shortens in higher temperatures

CURE TIME: 12 hours to top coat. 24 to 36 hours to full cure

RECOAT WINDOW: Endless. Ecodur 201R will always re-bond to itself.

SOLIDS: 100% solids, solvent free, VOC free

COMPONENTS: Part A: castor oil, hydrated gypsum - Part B: Polymeric (MDI)

FINISHED PRODUCT CHARACTERISTICS

ODOR: Mild, pleasant vegetable oil and gypsum odor prior to curing - disappears completely upon full cure.

FIRE PERFORMANCE: When tested in accordance with CAN/ULC S102-M88 standard method of test for surface burning characteristics of building materials and assemblies, the flame spread classification is "1" or "A" with a flame spread value of 15 for the product used as a deck coating. For reference, untreated Red Oak is a combustible material that has a flame spread classification of 100 and inorganic reinforced cement board is a non-combustible material that has a flame spread classification of 0.

WATER RESISTANCE: High resistance to water, sea water, hot or cold.

SOLVENT RESISTANCE: High resistance to most petro-chemical solvents with few exceptions. Refer to chemical compatibility charts.

UV RESISTANCE: UV causes the material to discolor after prolonged exposure. No substantial degradation of coating has been found on 25 year field samples or 1500 hour weatherometer tested samples.

ADHESION: Bonds to concrete, Ecodur Roof Coatings, steel, wood, asphalt, tar, paints, etc.

PULL-TESTING (BEFORE APPLICATION): For best results, conduct a pull test (Tietex T272 or 325) to test the surface and to ensure no contaminants are present before application.

STANDARD APPLICATION: Mechanically mix all of Part A. Cordless drill mixers are not recommended. Double auger mixers or other powered concrete mixing drills are recommended. After pre-mixing part A, add full part B while mixing.

Continue mixing until fully combined, 2-3 minutes. Pre-plan your work area and make sure you can use all mixed product in 30-40 minutes. Dump product into work area and spread with notched squeegee, back-roll immediately. There is no need to maintain a wet edge as product will continually bond to itself.

THICKENING: When thicker product is desired for crack filling or building up, use any of the pre-approved thickeners to achieve the thickness desired. Thickeners include: Crushed walnut shell, fumed silica, crushed polyethylene, and powdered polystyrene.

Thickening can reduce UV performance. Apply a layer of unthickened Ecodur or approved topcoat over thickened Ecodur.

STORAGE: Do not allow stored product to freeze. Store in a cool, dry place. Part B must be kept free of moisture. Keep container closed. Part B absorbs moisture from the air if left opened and can produce CO₂ gas, which can cause pressure build up.

SHELF LIFE: Unopened containers have an undetermined shelf life. It is recommended to use all product within 1 year.