Recoil Recycled Rubber Flooring combines vulcanized post-consumer recycled automobile tires with vulcanized post-industrial recycled and colored rubber Ethylene-Propylene Diene Monomer (EPDM) chips to create a very tough and durable flooring product. Designed specifically for commercial fitness applications, it can also be used for play areas, fitness centers, home gyms, day care, cardio areas, ice arenas and retail flooring. The crumb rubber material along with the colored EPDM chips are bonded together with a premium urethane binder that creates a non-porous product that will not absorb liquids and allows for easy removal of spills and unwanted debris.

Ideal For:

Sporting Facilities: weight rooms, locker rooms and areas with soft or rubber cleats.

Animal Facilities: veterinarian office, doggy day-care and dog walks

Education: multi-purpose areas where heavy foot traffic is present

Healthcare: physical therapy, stretching and activity areas

### Product Description

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### Technical Data

- **Nominal Dimensions - Square Edge:** 36” x 36”
- **Nominal Dimensions - Interlocking:** 34 ¼” x 34 ¼”
- **Nominal Dimensions - Rolls:** 48” x 24 ½’ - 49 ½’
- **Finish:**
  - Area Per Tile/Roll: 9 sq. ft. (square edge)
  - 8.2 sq. ft. (interlocking)
  - 99 - 198 sq. ft. (rolls)
- **Thickness:** ½", ¾", ⅝", ½"
- **Weight Per Tile/Roll:**
  - (weight varies based on area/thickness)
  - 8.2 - 10.7 Lbs. (tiles)
  - 101 - 262 Lbs. (rolls)
- **Quantity Per Pallet:**
  - 100 tiles
  - 4 - 12 rolls
- **ASTM F3041 - Bonded Crumb Rubber:**
  - Type I & II, Class A, B, C & D
  - > 0.8
- **ASTM D2047 - Coefficient of Friction:**
  - Unclassified, 0.10 W/cm²
  - Passes
- **ASTM E648 (NFPA 253) - Critical Radiant Flux:**
  - Passes
  - 250 PSI
- **ASTM D3389 - Abrasion Resistance:**
  - Passes
- **ASTM F137 - Flexibility:**
  - Passes
- **ASTM F970 - Static Load Limit:**
  - Passes
- **ASTM F1514 - Heat Stability of Color:**
  - Passes
- **ASTM F925 - Short Term Chem. Exposure:**
  - Passes (See ASTM F3041 Test)
- **ASTM E492 Impact Sound Transmission:**
  - 57 IIC*
- **Acclimation Time:**
  - 48 Hours
- **Storage & Acclimation Temperature:**
  - 65° - 85° F

* 6” Concrete, Drop Ceiling Assembly

### Features

- **Non-Porous Material**
- **PVC Free**
- **Made From Recycled Materials**
- **Easy To Maintain**
- **Qualifies for LEED Credits**
- **Shock-Absorbing**
- **Noise-Reducing Material**
- **Extremely Durable**
- **Excellent Chemical Resistance**
- **Excellent Slip Resistance**

### Additional Information

**Approved Adhesives**
ExceLSior MS-700 Modified Silane Adhesive
ExceLSior EW-710 Epoxy Wet-Set Adhesive

**Approved Floor Finishes**
ExceLSior PF-960 Performance Finish

_Do not apply finish to areas that may be exposed to heavy weights, heavy use or high/heavy impact._

**Custom Offerings**
Custom colors, sizes and thicknesses available upon request. Contact a Roppe Distributor or Sales Representative for more information.

### Technical Documents & Support

Additional product resources and technical documents are available online at roppe.com. For additional technical support, send an e-mail to solutions@rhctechnical.com.
1. PRE-INSTALLATION CHECKLIST
Consult all associated product literature concerning adhesive installation, maintenance and warranty prior to installation of flooring. Ensure installation area and material storage temperatures are between 65° F (19° C) and 85° F (30° C) for at least 48 hours before, during and after installation.

Allow all trades to complete work prior to installation. Deliver all materials to the installation location in its original packaging with labels intact. Do not stack pallets to avoid damage. Remove any plastic and strapping from product after delivery.

Inspect all material for proper type, color and matching lot numbers if appropriate. Ensure that all adhesives intended for installation are approved for use with flooring material. Ensure HVAC system is operational and fully functioning at normal operating conditions.

Protect installation area from extreme temperature changes, such as heat and freezing, as well as direct sunlight for at least 48 hours before, during and after installation. Ensure all substrate preparation and moisture testing requirements have been performed, read and/or understood by all interested parties. Do not proceed with installation until all conditions have been met.

2. PRODUCT LIMITATIONS
Due to the recycled nature of this product, color variation can and will be present from piece to piece and roll to roll. Deliberate damage in baseball dugouts, ice rinks dugouts, ice rink penalty boxes, ice rink access points, etc. is not covered under the product warranty. Do not install materials over LVT, cushioned vinyl, hardwood flooring, cork, rubber, or asphaltic materials. Do not install in residences and in or around commercial kitchens or areas that may be exposed to oil, grease, lubricating oils, solvents and other petroleum based hydrocarbons. Not recommended for basketball or volleyball playing surfaces. Do not install in areas that may be subjected to sharp, pointed objects, such as spikes. When installing in areas that may be exposed to ice skates, ensure skate guards are worn. When installing in areas where free weights and dumbbells over 50 lbs. will be used, ensure material is at least 3/8" thick. All installations of 5/32" & 1/4" Interlocking must be fully adhered indoors and all thicknesses outdoors. All thicknesses of Square Edge must be fully adhered both indoors and outdoors. Do not allow product to be directly exposed to extreme heat sources, such as radiators, ovens or other high-heat equipment. May be susceptible to staining from rubber tires, casters or rubber-backed walk-off mats, as well as harsh disinfectants, cleaning agents, dyes or other harsh chemicals - ensure all chemicals and materials that may come in contact with flooring surface will not stain, mar or otherwise damage the flooring material prior to use.

3. SUBSTRATE PREPARATION
All substrates must be prepared according to ASTM F710, as well as applicable ACI and RFCI guidelines. Substrates must clean, smooth, permanently dry, flat, and structurally sound. Substrates must be free of visible water or moisture, dust, sealers, paint, sweeping compounds, curing compounds, residual adhesives and adhesive removers, concrete hardeners or densifiers, solvents, wax, oil, grease, asphalt, visible alkaline salts or excessive efflorescence, mold, mildew and any other extraneous coating, film, material or foreign matter.

All substrates must have any and all existing adhesives, materials, contaminants or bond-breakers mechanically removed via scraping, sanding, grinding or buffing with a 25 grit DiamaBrush Prep Plus tool prior to adhesive installation. In extreme situations, shotblasting may be required. Mechanical preparation must expose at least 90% of the original substrate. Following cleaning and removal, all substrates must be vacuumed with a flat vacuum attachment or damp mopped with clean, potable water to remove all surface dust. Sweeping without vacuuming or damp mopping will not be acceptable.

All porous substrates must be tested per ASTM F3191 to confirm porosity. Use a pipette or equivalent to conduct three tests by placing a .05 mL (1/4" wide) droplet of clean, potable water onto the surface. If the substrate absorbs water within 60 seconds, the substrate is considered porous. Conduct 3 tests for the first 3000 sq. ft. and one for each additional 2000 sq. ft., at least one per room. All other substrates that do not meet this requirement are considered non-porous. Ensure that all non-porous substrates are not contaminated with any aforementioned contaminants.

It is recommended that all substrates have a floor flatness of FF32 and/or a flatness tolerance of 1/8" in 6’ or 3/16" in 10’. Substrates that do not meet this requirement should have a compatible cementitious patch (such as the Excelsior CP-300) or self-leveling underlayment (such as the Excelsior SU-310) installed to flatten the installation area.

Do not use solvent/citrus based adhesive removers prior to installation. Follow The Resilient Floor Covering Institute’s (RFCI) “Recommended Work Practice for Removal of Existing Floor Covering and Adhesive”, and all applicable local, state, federal and industry regulations and guidelines. When removing asbestos and asbestos containing materials, follow all applicable OSHA standards.

CONCRETE SUBSTRATES
All concrete must have a minimum compressive strength of 3500 PSI and be prepared in accordance with ASTM F710. When flooring is being installed directly over concrete, concrete surfaces that have an ICRI Concrete Surface Profile (CSP) over 4 should be flattened with a self-leveling underlayment or a patch to prevent imperfections from telegraphing through flooring materials. On or below grade concrete must have a permanent, effective moisture vapor retarder installed below the slab.

New or existing concrete substrates on all grade levels must be tested in accordance with ASTM F2170, using in situ Probes, to quantitatively determine the amount of relative humidity no more than one week prior to the installation.
In addition to ASTM F2170 Relative Humidity Testing, existing concrete that has previously had floor covering installed on all grade levels must be tested in accordance with ASTM F1869, using Calcium Chloride test kits, to quantitatively determine the Moisture Vapor Emissions Rate (MVER) of the concrete. If ASTM F2170 or ASTM F1869 test results exceed the prescribed limits, a moisture mitigation product, such as Excelsior MM-100 Moisture Mitigation, must be installed prior to proceeding with installation. Install The MM-100 per technical data sheet at a rate of 400 sq. ft. per gallon. When installing over concrete as moisture mitigation, material must be applied in two coats. Do not install flooring until moisture testing has been conducted per the appropriate standard and/or moisture mitigation has been installed and is dry to the touch. Do not install flooring in below grade areas when hydrostatic pressure is visible or suspected.

**RESINOUS SUBSTRATES**

When installing directly over a resinous products, such as the Excelsior MM-100 or an epoxy coating, ensure that coating is dry to the touch and has cured for the prescribed length of time. Substrate must be clean, dry, sound and free of contaminants. Ensure to follow installation procedures and trowel sizes for non-porous substrates.

**GYPSUM BASED SUBSTRATES**

Gypsum-based substrates must have a minimum compressive strength of 3500 PSI. Gypsum substrates that do not meet this requirement must have one coat of the Excelsior MM-100 or equivalent installed to improve the tensile/pull-off strength of the substrate. Substrate must be structurally sound and firmly bonded to subfloor. Any cracked or fractured areas must be removed and repaired with a compatible patch or repair product. Follow instructions for installation over a gypsum substrate. New or existing gypsum substrates may require a sealant or primer. Follow all manufacturer’s recommendations regarding preparation for resilient flooring installation.

**WOOD SUBSTRATES**

Wood substrates must be prepared in accordance with ASTM F1482. Wood subfloors should be of double layer construction with a minimum thickness of 1”. Crawl spaces beneath wood subfloors shall be in compliance with local building ventilation codes and have at least 18” of cross-ventilated space between the ground and the joists. Wood joists should be spaced on not more than 16” centers. Prior to installation, moisture retardant sheathing with a maximum rating of 1.0 perm must be installed beneath the wood subfloor, overlapped at least 8”. For standard installations, use Underlayment Grade plywood with a minimum thickness of 1/4” thick and a fully sanded surface. When floors may be subjected to moisture, use an APA approved exterior grade plywood. Other wood subfloor materials, such as OSB, lauan, particleboard, chipboard, fiberboard or cementitious tile backer boards, are not acceptable substrates. Avoid preservative-treated and fire-retardant plywood, as some may be manufactured with resins or adhesives that may cause discoloration or staining of the flooring. Do not install flooring directly over solid or engineered hardwood flooring without first installing plywood or a suitable cementitious repair product at a minimum thickness of 1/4” over the hardwood flooring. Wood subfloor deflection, movement, or instability will cause the flooring installations to release, buckle or become distorted. As such, do not use plastic or resin filler to patch cracks. Do not use cement or rosin coated nails and staples or solvent-based construction adhesives to adhere the plywood. Do not install on a sleeper system (wood subfloor system over concrete) or directly over Sturd-I-Floor panels.

**METAL SUBSTRATES**

Metal substrates must be thoroughly sanded/ground and cleaned of any residue, oil, rust and/or oxidation. Substrate must be smooth, flat and sound prior to installation. When installing in areas that may be subject to topical water or moisture and/or high humidity, an anti-corrosive coating must be applied to protect metal substrate. Contact a local paint or coating supplier for coating recommendations. Install flooring material within 12 hours after sanding/ grinding to prevent re-oxidation. Any deflection in the metal floor can cause a bond failure between the adhesive and the metal substrate. Ensure to follow installation procedures and trowel sizes for non-porous substrates.

**EXISTING FLOORING SUBSTRATES**

The suitability of existing flooring as a substrate depends on the specific requirements of the adhesive being used to install the material. As such, refer to the adhesive requirements for existing flooring substrates and ensure all adhesive requirements and guidelines are followed.

**RADIANT HEATING SUBSTRATES**

Recycled rubber flooring products are not recommended for use over radiant heating systems.

4. **CRACKS, JOINTS & VOIDS**

All cracks, joints and voids, as well as the areas surrounding them, must be clean and free of dust, dirt, debris and contaminants. All minor cracks and voids 3/64” wide or less may be repaired with a suitable cementitious patch. Due to the dynamic nature of concrete slabs, manufacturer cannot warranty installations to cover expansion joints, cracks or other voids (such as control cuts, saw joints and moving cracks or voids) wider than 3/64”. Do not install...
flooring directly over any expansion joints or cracks wider than 3/64".

All expansion joints should have a suitable expansion joint covering system installed to allow expansion joint to freely move. To treat expansions joints where an expansion joint covering system can’t be installed or to treat through cracks (depth at least 75% of the thickness of the concrete), chase joint or crack with a suitable saw or grinder and open to a minimum width of ¼". Be sure to clean all dust, dirt and debris from crack. Joints and cracks should then be sealed with a suitable, elastomeric caulk (such as Ardex Ardiseal Rapid Plus, Mapei P1 SL or equivalent) designed for use in expansion joints. Install a closed-cell backer rod at prescribed depth and follow caulk manufacturer’s instructions for installation. Ensure surface is troweled flush with surface of concrete.

To treat other cracks and voids (such as control cuts, saw-cut joints and surface cracks) over 3/64", chase joint or void with a suitable saw or grinder and clean all dust, dirt and debris from crack. Fill entire crack with a rigid crack filler (such as Ardex Ardifix, CMP CM10 or equivalent) designed for use in control or saw-cut cuts. Follow material manufacturer’s instructions for installation. Ensure surface is troweled flush with surface of concrete.

Consult a structural engineer prior to treating any crack or joint, especially those that may affect structural integrity (such as expansion joints). Review all manufacturer installation instructions and/or consult manufacturer technical staff for all crack or joint filling products prior to treating joints and cracks.

5. INTERLOCKING INSTALLATION

Ensure substrate is suitably prepared prior to installation, as manufacturer is not responsible for substrates that have not been properly prepared and tested for moisture. Indoor installations of interlocking tile are recommended to be loose-lay without adhesive. All outdoor installations, of all thicknesses, as well as indoor installations of 5/32" and 1/4" interlocking tile are required to be fully adhered using one of the approved adhesives above; use square edge tile installation instructions for these installations.

Ensure substrate is clean, dry and sound prior to installation. Square installation area using the 3-4-5 squaring rule or similar method to ensure acceptable installation and establish initial installation starting line. Some flooring products, colors and textures have latent and acceptable color and shade variations.

Dry-lay material prior to installation to verify that there are no visible defects, damages or excessive shading variations. Observe directional arrows, (this side up) on face of tile to ensure arrows are installed in the same direction. If there are concerns regarding shade or color variation, do not install material and consult sales agent and manufacturer’s technical staff.

Whenever possible, avoid installing flooring seams directly over seams in the substrate. Borders and perimeter pieces should be no less than ½" the width of the tile and should be no less than 1/8" from the wall, depending on depth of wall base or trim, to allow for expansion.

Borders and other specialty cut tiles should be undercut to fit snugly, not tightly, against thresholds, transition strip, fixtures, door jambs or other obstacles; forcing incorrectly sized tiles into smaller areas will cause the tile to buckle.

Roll material with a 3 section, 100 lb. to ensure all tiles are properly interlocked, crossing in a perpendicular direction after initial roll. Use a hand roller in areas that cannot be reached with larger roller. Visually inspect installation to ensure that material has not shifted and all seams are tight and flat. To finish open edges of interlocking tile or areas intended to but to another flooring material, use a straight edge to remove male ends of tile and install appropriate finishing accessory.

6. SQUARE EDGE INSTALLATION

Ensure substrate is suitably prepared prior to installation, as manufacturer is not responsible for substrates that have not been properly prepared and tested for moisture. All installations of Square Edge both indoors and outdoors must be fully adhered. Ensure adhesive is approved for use with flooring material and the proper trowel type and size is used, as manufacturer is not responsible...
room using the 3-4-5 squaring rule or similar method to ensure acceptable installation and establish initial installation starting line. Dry-lay several tiles to establish the best layout for the installation area and facility and ensure equal tile sizes around the perimeter. Allow a 1/8” gap around the entire perimeter of the room to allow for expansion, ensuring gap is no wider than the trim, wall base or molding to be installed. Cut borders and other specialty pieces to fit snugly against or around walls, thresholds, transition strips, fixtures and other protrusions or accessories. Avoid forcing material tightly against vertical surfaces, as material may buckle. Apply adhesive according to instructions for specific product in use and observe adhesive flash times, if applicable. Ensure all adhesive working times and flash times are observed and followed. Be sure to follow instructions based on substrate porosity (porous or non-porous). Use below chart for reference. Replace trowels at recommended intervals to maintain proper trowel ridge and spread rate. Use a pyramid layout when installing tiles to eliminate run-off. Periodically lift material to ensure proper adhesive transfer and ensure adhesive has not surpassed the open time - adhesive should cover 90% of tile. Pay close attention to open times to avoid adhesion issues. This may require installing material in smaller sections. When installing into adhesive using a wet-set method, avoid walking or working on material until adhesive has acclimated, carefully fold back half of material and apply adhesive according to instructions for specific product in use. Use chart at top left for reference.

<table>
<thead>
<tr>
<th>Adhesive Coverage Rates (Per Gallon)</th>
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<tr>
<td>Adhesive</td>
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<tr>
<td>MS-700</td>
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<td>EW-710</td>
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When installing into adhesive using the 3-4-5 squaring rule or similar method to ensure acceptable installation and establish initial installation starting line. Measure and determine room layout and seam location prior to cutting material. Overlapping seams by no more than 1/8” to ensure tight seams. Vertical seams must be staggered by 6’ – 10’, depending on room size and roll length and must be cut prior to installing material with adhesive. Ensure flooring seams do not directly overlap flooring seams any seams in substrate. Ensure to allow a 1/8” gap around the entire perimeter of the room to allow for expansion, ensuring gap is no wider than the trim, wall base or molding to be installed. Cut borders and other specialty pieces to fit snugly against or around walls, thresholds, transition strips, fixtures and other protrusions or accessories. Avoid forcing material tightly against vertical surfaces, as material may buckle. Ensure material is facing the same direction that it is unrolled in, using directional arrows for reference. Allow material to acclimate in place overnight.

8. ROLL INSTALLATION

Ensure substrate is suitably prepared prior to installation, as manufacturer is not responsible for substrates that have not been properly prepared and tested for moisture. Ensure adhesive is approved for use with flooring material and that proper trowel type and size is used, as manufacturer is not responsible for any and all adhesion issues related to improper adhesive selection or usage. Once all seams have been cut and material has acclimated, carefully fold back half of material and apply adhesive according to instructions for specific product in use. Use chart at top left for reference. When necessary, use weights (such as unused adhesive pails) to hold material back while adhesive flashes. Replace trowels and applicators at recommended intervals to maintain proper trowel ridge and spread rate.

Do not work on material that is installed into wet adhesive, as this could displace adhesive. When working off of material is not possible, use a kneeling board or equivalent to disperse weight evenly and prevent adhesive displacement. If having trouble getting seams tight, a residue-free releasable tape (such as 3M painters tape) can be used to hold shifting seams together. If adhesive is oozing out of seams or material is shifting excessively, adhesive may be too wet for installation. Review open times and allow adhesive to flash longer prior to installing material into adhesive.

To prevent movement, dust, dirt, debris and topical moisture in or around seams, tape seams together or at recommended distance after installation using a multi-purpose masking tape intended for flooring and hard surfaces. Material that has been cut towards the inside end of the roll may be prone to edge-lifting and curling on end seams and butted seams - if this is evident after installation, use
weight to weigh down edges.

Roll installation area with a 3 section, 100 lb. roller within 15 minutes of installation, crossing in a perpendicular direction after initial roll. Re-roll material 30 minutes after initial roll.

If adhesive is oozing out of seams or material is shifting excessively, adhesive may be too wet for installation. Review open times and allow adhesive to flash longer prior to installing material into adhesive.

Clean excessive adhesive or adhesive residue from the surface of the material according to adhesive instructions.

9. INITIAL MAINTENANCE

Ensure that adhesive has cured for recommended period of time prior to conducting initial maintenance. Remove any protective coverings prior to cleaning. Sweep or dust mop and vacuum flooring to remove any dirt, dust or debris. Do not use vacuums that have a beater bar or electric brooms with hard plastic bottoms or no padding, as this may cause discoloration, scratching and loss of sheen. Do not use detergents, abrasive cleaners or “mop and shine” type products, as they will dull the finish and sheen of the flooring material.

Mix 2-4 ounces of Excelsior NC-900 Neutral Cleaner per gallon of clean, potable water. Use a clean mop to apply cleaning solution to the area and let stand for 5-10 minutes.

If using a low-speed floor buffer or swing single disc scrubber (180 - 360 RPM), buff floor while wet using a 22 gauge soft bristled scrubbing brush or a 3M 4100 White Super Polish Pad. If flooring is heavily soiled, a 3M 5100 Red Cleaning Pad may be required.

If using an auto-scrubber, buff floor while wet using a 22 gauge soft bristled scrubbing brush or a 3M 5100 Red Cleaning Pad. If flooring is heavily soiled, allow cleaner to remain on surface for an additional 5-10 minutes before scrubbing and removing.

Use an auto-scrubber, wet vacuum or clean mop to remove any and all excess cleaning solution. Rinse area with clean, cool water and allow floor to dry entirely. Ensure flooring area is clean and that all all cleaning residue has been removed (this may require additional rinsing).

All installation areas that will be difficult to maintain with a buffer or auto-scrubber (such as elevators cabs or small rooms) or will not receive routine maintenance with a buffer or auto-scrubber (such as residences) must have a compatible floor finish installed, such as the Excelsior PF-960, in order to ease maintenance of the floor covering.

Do not apply finish to areas that may be exposed to heavy weights, heavy use or high/heavy impact. For further information regarding daily or routine maintenance, please consult the product care & maintenance document or the associated product technical data sheet.

10. FLOORING PROTECTION

Protect newly installed flooring with construction grade paper or protective boards, such as Masonite or Ram Board, to prevent flooring damage, especially by other trades. Limit usage and foot traffic according to the adhesive’s requirements (see chart below). When moving appliances or heavy furniture, protect flooring from scuffing and tearing using temporary floor protection. All furniture casters must be made of a soft material and must have a contact point of at least 1” in width to limit indentation and flooring damage. All rolling chairs or seating must have a resilient flooring chair pad installed over the finished floor to protect floor covering. All fixed furniture legs must have permanent felt or soft rubber floor protectors installed on all contact points to reduce indentation. Floor protectors must have a flat contact point of at least 1” in width and must cover the entire bottom surface of the furniture leg.

Ensure all furniture castors and chair legs and are clean and free of any and all dirt and debris. Routinely clean chair castors and furniture legs to ensure that dirt or debris has not built up or become embedded in castors or floor protectors. Replace chair castors and floor protectors at regular intervals, especially if they become damaged or heavily soiled.

Place walk-off mats at outside entrances. Ensure mats are manufactured with non-staining backs to prevent discoloration.

11. WARRANTY

Roppe provides a 3 Year Limited Warranty. For additional information, see associated warranty documents.