KRĒTUS

ECOMAGNETIC
INSTALLATION GUIDE

SAFETY

Review current Safety Data Sheet(s) and all relevant KRETUS® documentation. Safety conditions and personal protective equipment must be considered before handling materials.

TESTING AND WARRANTY

Before you begin installation, review Pre- and Post-Job Checklists available at kretus.com/project-planning. Test and look for any unknown site conditions and/or defects.

ON-SITE APPLICATION TESTING

To ensure desired results are achieved, the system should be tested in a small area on site before beginning installation.

MAINTENANCE AND CLEANING

For daily cleaning of fully cured system, use KRETUS® Coating Cleaner or similar pH-neutral cleaning product. For more information, review the Maintenance and Cleaning Guide available at kretus.com/project-planning.

PRODUCT GUIDE

Before selecting product, consider jobsite temperature, MVER, applicator's skill level, and time available for installation.

ECOMAGNETIC COATING (3 COMPONENT)	
RECOMMENDED APPLICATION TEMPERATURE	<80°F, 55% RH
WORKING TIME	15-25 min
RECOAT TIME	6-24 hrs.
RETURN TO SERVICE (FOOT TRAFFIC)	24 hrs.
FULL CURE (VEHICLE TRAFFIC)	5 days

All times recorded using 1-qt. sample at ambient temperature of 70°F and 50% humidity.

STORAGE, HANDLING & DISPOSAL

- Storage: Store materials in a cool (60-80°F), dry place out of direct sunlight. DO NOT allow water into materials unless instructed to do so.
- Handling: Safety Data Sheets must always be adhered to. No personnel may touch, relocate, or use materials without proper training. All materials are to be treated as dangerous substances without firsthand knowledge. Congregating, eating, smoking, or drinking of any kind is not allowed on or near materials.
- Disposal: Follow federal, local, and building requirements for waste disposal.

LIMITATIONS

- Complete samples and onsite mockups to ensure desired results are achieved.
- Prime Coat: Where outgassing is suspected or prevalent, a prime coat may be required.
- Level surface areas: Changes in surface level must be no greater than 1/32 inch.

- DO NOT apply single coat greater than 12 mils thick (133 sf per gallon). DO NOT let material puddle on floor.
- Application temperatures: Material cures faster as temperature and humidity increase. Material cures slower as they decrease. If application temperatures are outside of those recommended, contact your KRETUS® Technical Representative.
- Apply material when temperature is decreasing—adhere to the KRETUS® Dew Point Calculation Chart available at kretus.com/project-planning. DO NOT apply under direct sunlight. DO NOT install under inclement weather conditions.
- Coverage rates are for estimating purposes only. Factors such as waste, unusual/abnormal substrate conditions, and other unforeseen jobsite conditions may affect actual product yields and are the responsibility of the installer.

SUBSTRATE PREPARATION GUIDELINES

Contact KRETUS® Technical Representative if substrate is not listed below.

Concrete Substrate Must Be

- Clean: Remove all release agents, curing compounds, salts, efflorescence, grease, oil, dust, and other contaminates or particles that would hinder material's adhesion to substrate or cause material to have any raised or high points.
- Sound: Clean, repair, and treat all moving and nonmoving joints and cracks.
- Profiled: New concrete should be allowed to dry a minimum of 30 days. Mechanically prepare concrete to ICRI CSP 3. Adhere to ICRI (International Concrete Repair Institute) current standards.
- Level: If substrate is damaged and/or uneven, contact your KRETUS® Technical Representative for recommended self-leveling system.

JOINT AND CRACK REPAIR

Coatings tend to pull away from termination points (anywhere concrete ends), joints, cracks, gutters, drains. Anchor joints may need to be added 6" from termination points. Joints and cracks may need to be expanded to 2x the width and 1x the depth.

MIXING GUIDELINES

Select a well-ventilated area outside of application zone and out of direct sunlight. Ideal mixing station is 4-by-4-feet or larger level surface protected by cardboard or plastic liner. For mixing station examples, review KRETUS® Mixing Station photo gallery available at kretus.com/project-planning.

Mixing Drill

- low-RPM, low-torque drill and Jiffler double-bladed mixer

Prepare Materials for Application

Avoid delays during installation: Organize and inspect products, equipment, and tools. Contact your KRETUS® distribution center if products or packaging is damaged or if incorrect materials were delivered.

Group together the components and tools needed for each application:

- EcoMagnetic Coating Part A
- EcoMagnetic Coating Part B
- EcoMagnetic Coating Part C
- EcoMagnetic Tabs

Examine the components for each application individually:

- Part A: Check to see that appearance is consistent throughout and that batch numbers are the same. If different batch numbers, box (or mix) batches to keep coating consistent throughout application.
- Part B: Make sure there is no gelation or crystallization.
- Part C: Make sure material is dry and undamaged. Moisture will cause material to clump. Clumps should be sifted before combining with the other components.
- EcoMagnetic Tabs: Make sure tabs are not damaged.

Pre-Mix Components

- DO NOT pre-mix dry materials.
- Before combining any components, use a low-RPM, low-torque drill and a Jiffler double-bladed mixer to pre-mix each component separately until the texture, color, and consistency are uniform.
- Use a separate mixer for each product to avoid cross-contamination.

KRETUS® EcoMagnetic Coating Mixing Instructions

Continue mixing until all components have been thoroughly combined. Use a paint stick and spatula to scrape sides of and bottom of buckets and mixing vessel to ensure coating is thoroughly mixed. Ensure coating is thoroughly mixed throughout application as magnetic particles have a tendency to sink.

- Pour entire contents of Part A and Part B into the mixing vessel. Mix for 25-30 seconds or until translucent color is consistent throughout.
- Slowly add Part C and mix for 30-40 seconds or until texture and opaque gray color are uniform.
- Total mixing time: 2 minutes

Mixing Precautions

- Mixing the EcoMagnetic Coating requires a minimum of two people.
- Premeasure components before combining. Mix carefully to avoid introducing bubbles into the mixture.
- All mixing vessels must be clean. When adding materials to mixing vessel, use a spatula and paint stick to scrape the sides and bottom of each container to ensure all material has been added to mixture. Change mixing buckets every 2-5 batches. Buildup on bucket or transfer of buildup to a new batch affects the coating's overall appearance and may shorten a product's working time.
- DO NOT split kits.

- DO NOT combine kits in the same mixing vessel. This results in an uneven mix ratio and an uneven or bumpy coating.
- DO NOT mix more material than can be applied in the working time allotted.
- DO NOT leave mixed material in mass. As soon as components are combined, the coating begins to cure and its temperature rises. If product is left in mass, the heat created may cause material to smoke or catch fire. Mixing large batches will create more heat and can shorten the product's working time.
- DO NOT mix materials by hand.
- DO NOT mix or install material in confined space without proper ventilation.

DEW POINT CALCULATION

- Adhere to the KRETUS® Dew Point Calculation Chart available at kretus.com/project-planning.
- To avoid blistering and delamination, the substrate and material must be a minimum of 5°F above the dew point. This temperature must be maintained throughout drying time.
- EXAMPLE: If the air temperature is 60°F and relative humidity is 60%, the Dew Point is 45°F. The temperature of the substrate must be ≥ 50°F (45 + 5) before a coating can be applied.

APPLICATION GUIDELINES

Appearance

The coating should look smooth with a slightly dark rippling when it's troweled and rolled correctly. If the coating is applied too thin, it will appear rough with trowel or roller marks showing.

Precautions

- DO NOT apply under direct sunlight. DO NOT install if inclement weather is forecasted during time allotted for installation.
- Keep a wet edge while applying material. Wear spiked shoes when walking on material.
- Coverage rates are for estimating purposes only. Factors such as waste, unusual/abnormal substrate conditions, and other unforeseen jobsite conditions may affect actual product yields and are the responsibility of the installer.
- Keep large areas level: Regularly change the trowel to avoid weakening the coating's magnetic grab.
- DO NOT smooth the coating with a dry roller.
- DO NOT stop rolling or leave roller in coating during application. This will cause depressions or unevenness in the coating.
- DO NOT roll over the same point too many times or roll too quickly. This may cause bubbling and result in an uneven application.
- DO NOT let material puddle on floor as this may mirror through the vinyl.

Applying the Coating

Pour material in even rows along substrate. Distribute the material evenly with an 8-12 WFT-mil blade and follow immediately with a high-density foam roller. Load roller with coating and roll off any access before rolling across the troweled material. Apply light pressure when rolling across the material so that the coating is uniform across the entire substrate.

Edging

For a seamless transition, tape the edges of the working area to define the day's starting and end points. Remove the tape after the coating is installed but before material has cured.

If tape will not adhere to the area, mark the edges of the working area and feather edges of the coating with a flat trowel. Roll over feathered edge until it is level with the previous day's work.

Once the edges have cured it may be necessary to lightly sand adjoining edges.

Remove any of the coating that has peaked during application or during the removal of tape. Ensure there are no uneven or uncoated patches between edges.

Installing Tiles with EcoMagnetic Tabs

Allow for recoat window to pass before installing the tiles or EcoMagnetic Tabs. Actual working and cure times will vary based on temperature and humidity:

- higher temperature = faster working times
- lower temperature = slower working times
- higher humidity = faster working times
- lower humidity = lower working times

Once the recoat window has passed, dry-fit tiles according to desired finish. There should be no gaps between tiles. Place tiles in tight contact with each other. Then trim or cut end tiles to fit.

Place EcoMagnetic Tabs underneath tiles with magnetic side facing down. Each cut tile must have at least one tab underneath it. Place one tab wherever one tile meets another. For example, where four tiles meet, one corner of each tile should cover one quarter of the tab. See diagrams on the following pages.

When you are satisfied with the arrangement, stick tiles to the adhesive side of the tabs. Make sure there are no gaps between tiles and that the tabs are completely covered.

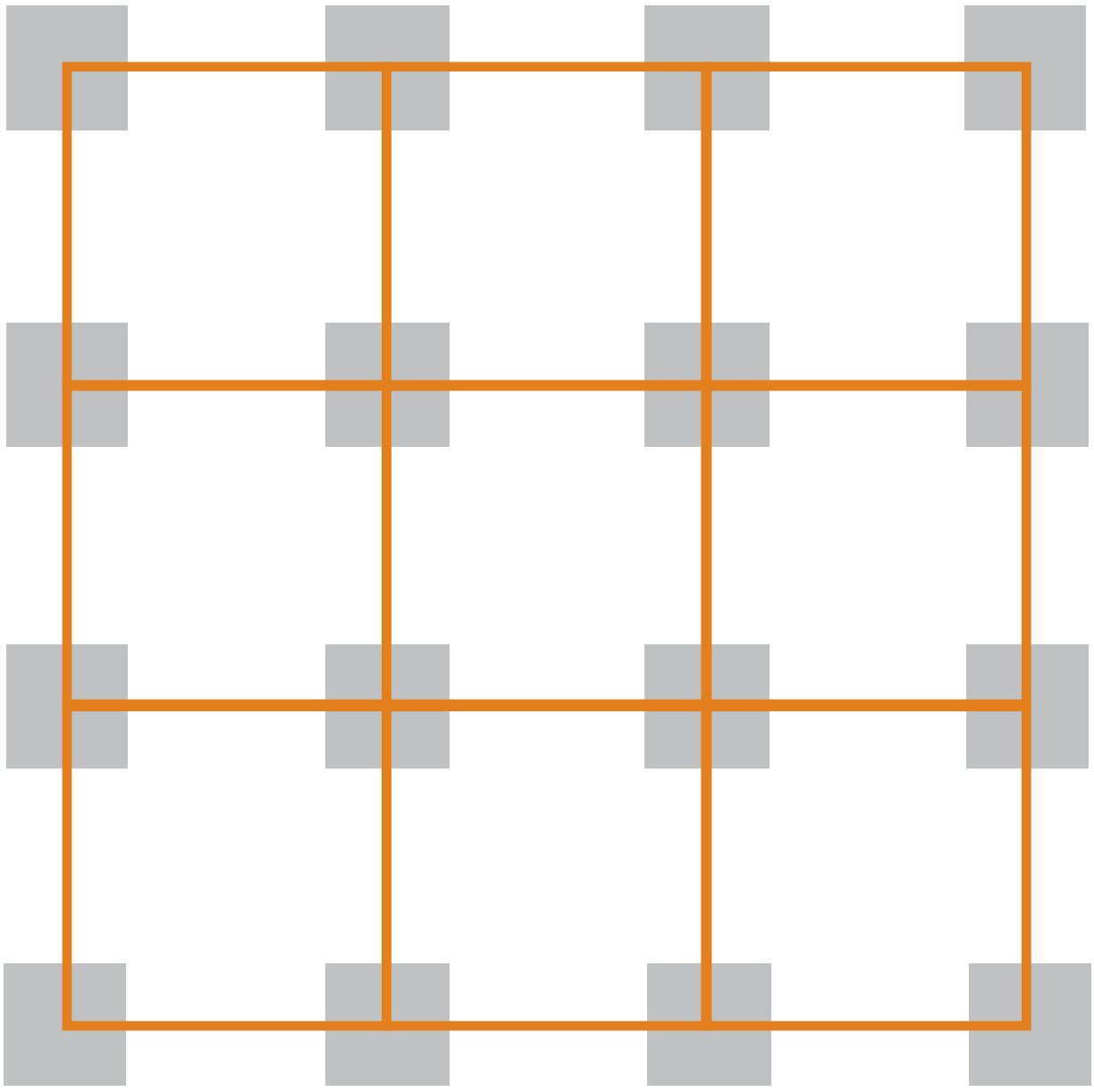
DIAGRAMS

Key

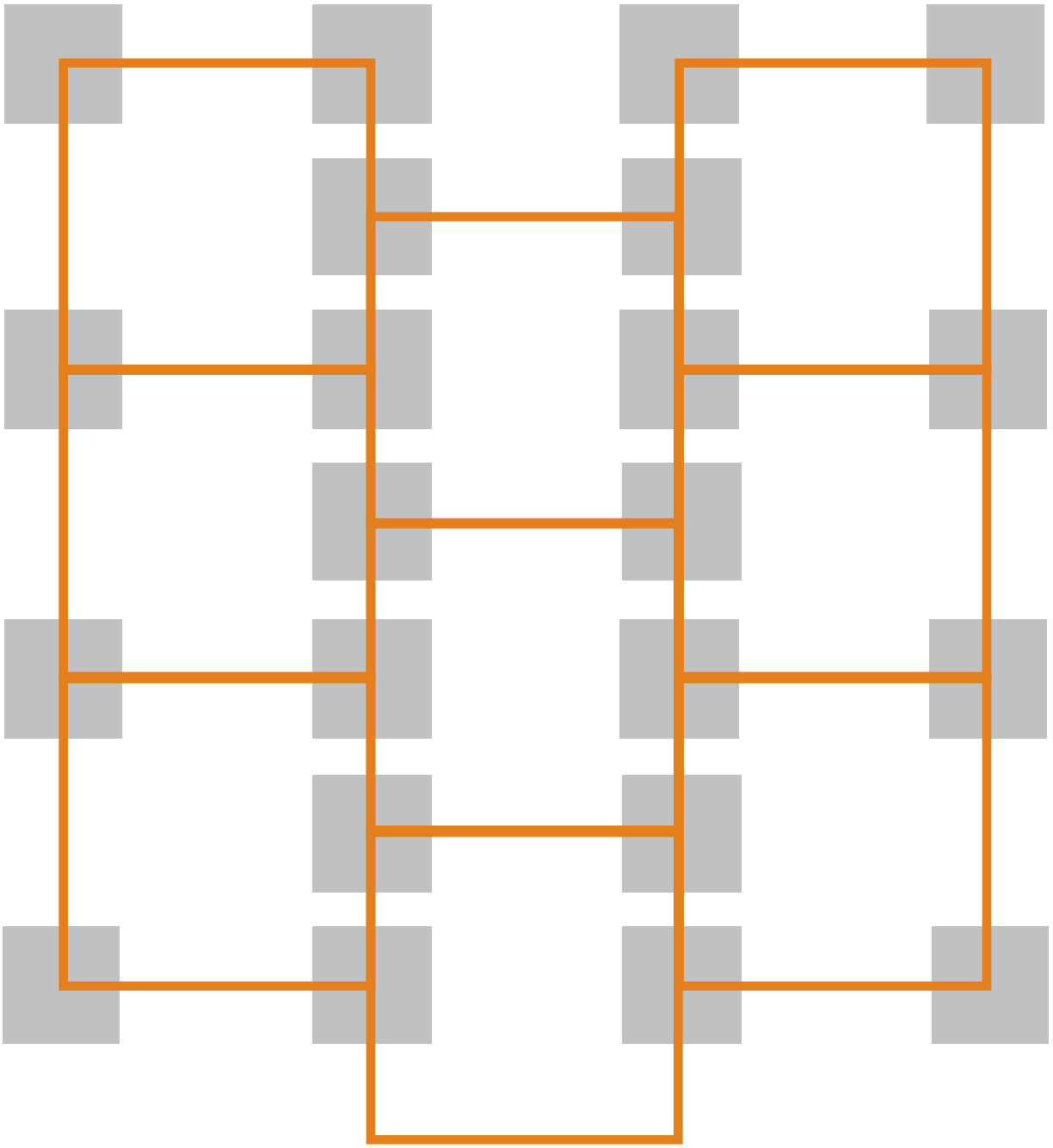
tile

KRETUS® EcoMagnetic Tab

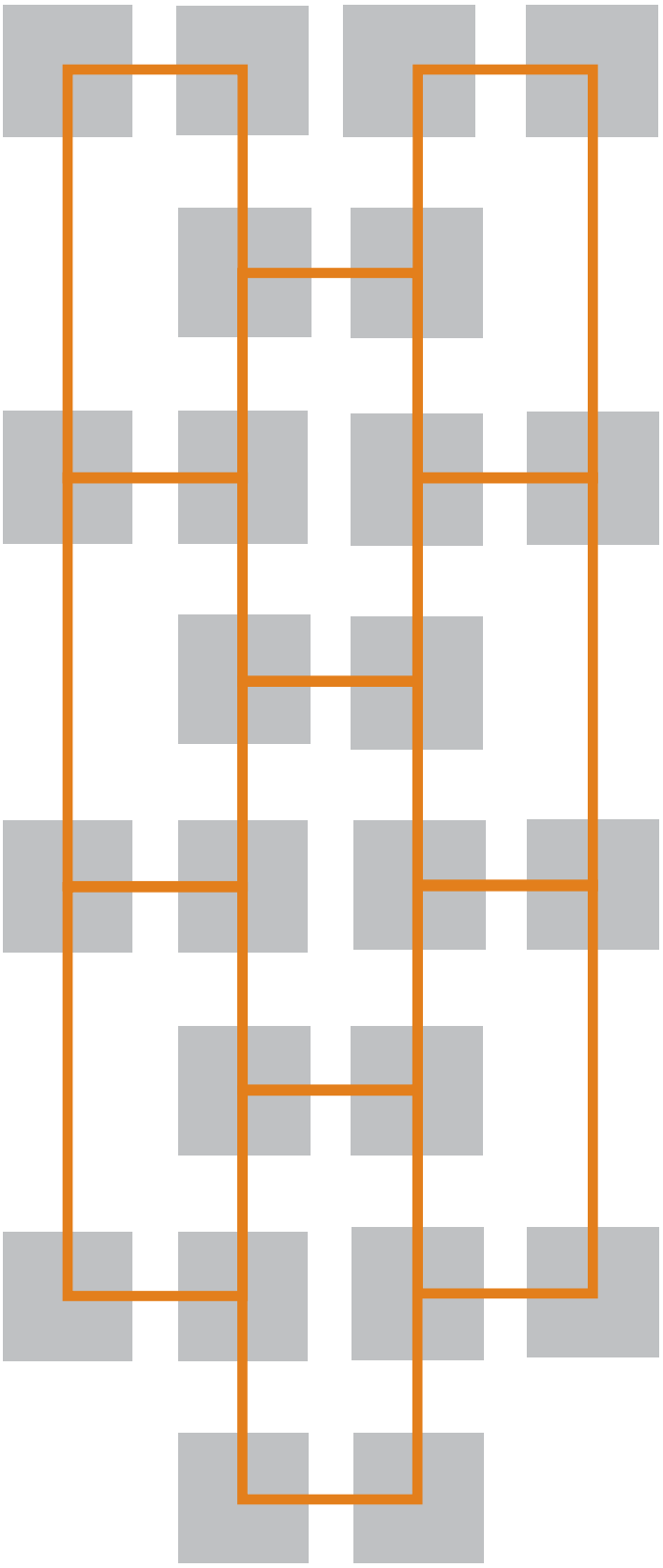
Square Tiles Aligned



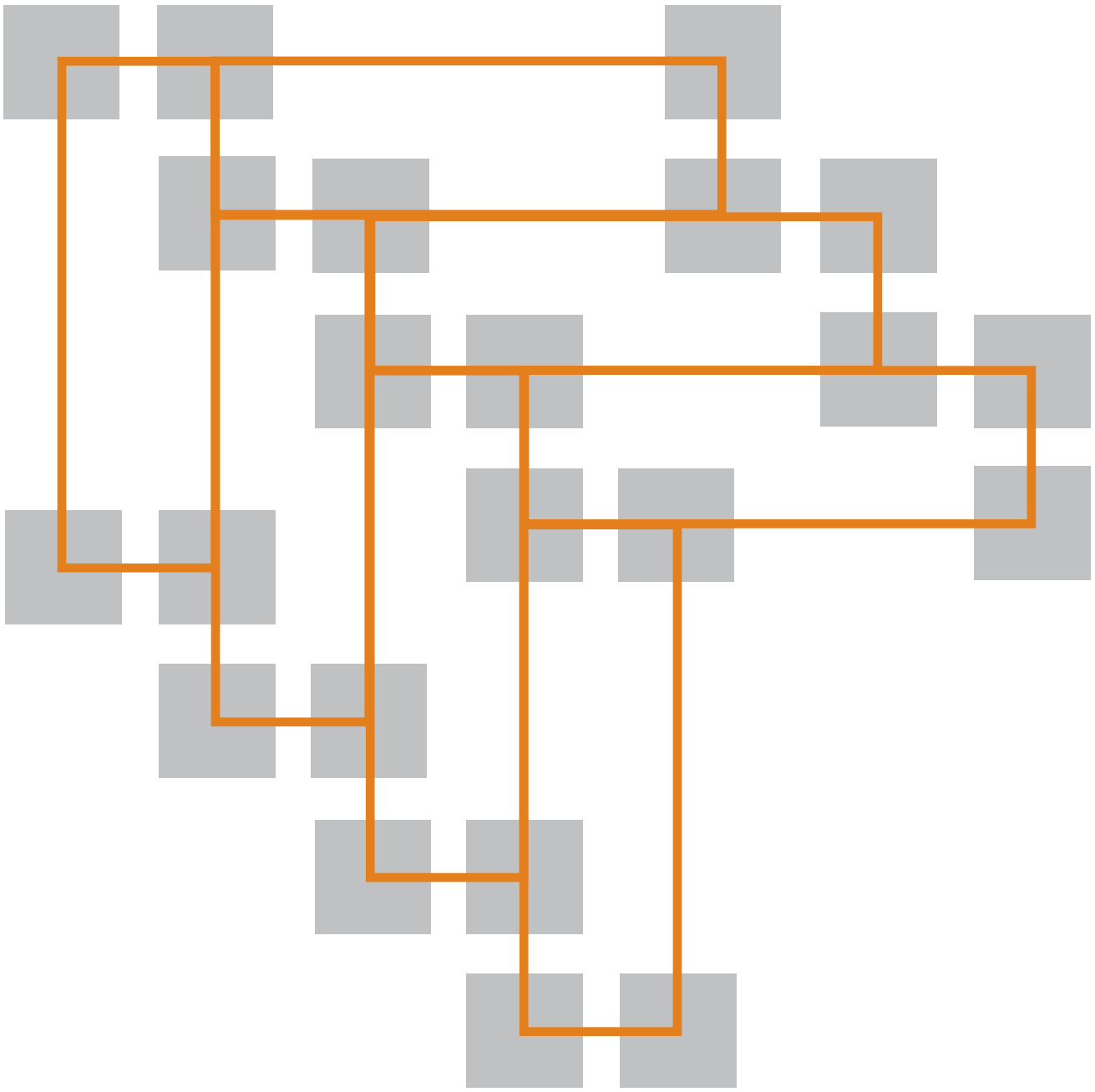
Square Tiles Staggered



Plank Tiles Staggered



Plank Tiles Herringbone



EQUIPMENT CHECKLIST

Safety

- ☐ KRETUS® Safety Data Sheets
- ☐ gloves
- ☐ hard hat
- ☐ knee pads
- ☐ respirator
- ☐ safety glasses
- ☐ _____
- ☐ _____

Mixing

- ☐ variable speed mixing drill
- ☐ mixing blades (Jiffler double-bladed mixer)
- ☐ paint mixing sticks
- ☐ measuring pails
- ☐ 1-, 2-, and 5-gallon pails (metal and/or plastic)
- ☐ masking/rosin paper
- ☐ cardboard, painter's plastic
- ☐ painter's tape
- ☐ duct tape
- ☐ spatula
- ☐ cooler and ice
- ☐ _____
- ☐ _____

Clean-Up

- ☐ rags
- ☐ stiff-bristle broom(s)
- ☐ cordless electric leaf blower and extra batteries
- ☐ _____
- ☐ _____

Additional Tools/Products

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Surface Preparation

- ☐ calcium chloride and pH test kit
- ☐ Wagner Rapid RH® test kit
- ☐ 10-gauge extension cords, 100'
- ☐ HEPA vacuum
- ☐ power source or generator
- ☐ Clarke 17" floor maintainer
- ☐ 17" sanding discs, 36 and 60 grit
- ☐ 17" sanding screens, 80 and 120 grit
- ☐ sanding/rubbing stones
- ☐ concrete grinding equipment
- ☐ diamond or shotblast tooling to achieve CSP 3
- ☐ _____
- ☐ _____

Application

- ☐ chip brushes
- ☐ paint accessories—extension rods, frames, pans
- ☐ 8-12 WFT-mil blade
- ☐ Midwest Rake® Easy Squeegee™ with flat flexible and rigid blades
- ☐ high-density foam rollers
- ☐ spiked shoes
- ☐ long-handled blade scraper
- ☐ _____
- ☐ _____

KRETUS® PRODUCT CHECKLIST

- ☐ Technical documents
- ☐ KRETUS® EcoMagnetic Coating (3 component)
- ☐ KRETUS® EcoMagnetic Tabs
- ☐ vinyl or carpet tiles
- ☐ KRETUS® Solvent Cleaner
- ☐ KRETUS® Power Cleaner
- ☐ _____
- ☐ _____

This serves as a general guide and is not a comprehensive list.

SYSTEM ACTION GUIDELINE

ECOMAGNETIC SYSTEM

This serves as a general installation guide. Before you begin, review all relevant documents.

NOTE: **PRIME COAT:** If outgassing is suspected or prevalent or if concrete is in poor condition or very porous, a prime coat may be required.
MVR COAT: If MVER is ≥3 lbs, a moisture vapor barrier may be required prior to installation.
LEVEL: If changes in surface level are ≥1/32 inch, a self-leveling application is required before installation.
COVERAGE RATES: Factors such as waste, unusual/abnormal substrate conditions, and other unforeseen jobsite conditions may affect actual product yields and are the responsibility of the installer. Coverage rates are for estimating purposes only.

	1 ECOMAGNETIC COATING	2 SURFACE COVERING
PRODUCT	A (ECOMAGNETIC COATING Part A) + B (ECOMAGNETIC COATING Part B) + C (ECOMAGNETIC COATING Part C)	Flooring finish (tiles, carpet, wood) ECOMAGNETIC TABS
STANDARD KIT MIX RATIO	A:B:C = 1/2 gal:1/2 gal:18 lbs	N/A
MIXING INSTRUCTIONS	Mix A with B for 25-30 seconds or until translucent color is consistent throughout. Slowly add Part C and mix for 30-40 seconds or until texture andcolor are uniform.	N/A
METHOD/ TOOLS	• Pour material in even rows along substrate. • Distribute the material evenly with an 8-12 mil WFT-mil blade and follow immediately with a high-density foam roller. • Load roller with coating and roll off any access before rolling across the troweled material. • Apply light pressure when rolling across the material so that the coating is uniform across the entire substrate.	• Dry-fit tiles according to desired look. Tiles must be in tight contact with no gaps between tiles. Cut/trim end tiles to fit. • Place EcoMagnetic Tabs under tiles with magnetic side facing down. Place one tab wherever one tile meets another. Each cut tile must have at least one tab under it. • When arrangement is set, stick the tiles to the adhesive side of the tabs. Make sure there are no gaps between tiles and that the tabs are completely covered.
RECOAT WINDOW	6-24 hrs.	N/A
COVERAGE RATE	200 SF/KIT	1 SF = 1 SF

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