

Mannington Commercial Sheet Guide

Crafted with Purpose®

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What is Heterogeneous Sheet?

Heterogeneous means layered or of multiple types. In this type of product, each of the layers looks a bit different. There's a back layer, a coated core layer, and a wear layer on top. When you look at it from the top, it looks like one thing, but when you cut and look at a cross section, you see multiple, distinct layers in which each layer serves a different purpose.

Why Specify Heterogeneous Sheet?

- · Availability in a variety of visuals, including: wood, stone, abstract and textile textures
- Manufactured in 6', 9' and 12' widths to help minimize seams and reduce related costs through heat welding
- Cost-effective sheet flooring solution
- Legacy of performance in rigorous healthcare settings
- Ortho-phthalate and PFAS free construction
- Manufactured in an ISO 9001 and 14001 certified facility
- Optimal solution for infection control spaces
- Slip performance is inherent with Quantum Guard Elite® technology

Design Considerations

- Printed visuals deliver a variety in pattern, color and scale
- These visuals add warmth to spaces (less clinical feeling than homogeneous sheet or rubber)
- Heterogeneous Collections compliment each other and can be used in concert:
 - Coordinating colors and patterns from Heterogeneous sheet to LVT
 - Designed to perform with 2,000PSI static load rating across resilient sheet portfolio
- Quantum Guard Elite® wear layer allows for no-finish applied maintenance and is found throughout all of our resilient sheet and LVT offerings, further simplifying maintenance concerns
- Carbon Offset with Appalachian Carbon Exchange: 105% Cradle to Gate equivalent

Sanitary Installation Options

(meets FGI Guidelines)

- IdealBase® and flash cove meet FGI Guidelines
- Flash Coved wall base (installed 6" up the wall) creates a more sterile environment. Heat welding required for this installation
 - Additional accessories include: cap strip, cap adhesive, cove stick, and stick adhesive.
- IdealBase®: alternate to flash coving. Will need heat welds and cold welds

Seam Installation Options

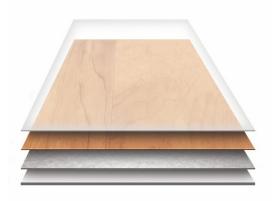
- Heat Weld: fusing sheets together using a heated vinyl weld rod
- Chemical Weld: chemically bonding 2 sheets together for the life of the floor. Used in all areas that are not required to be heat welded
 - Use MLG-33 Seam Sealer
- Quantum Guard Elite® Seam Coater Pen: This
 pen is applied over the heat weld to give it the
 same Quantum Guard Elite coating as the floor.
 Recommended for high traffic areas





Mannington Commercial Heterogeneous Collections

- Realities® III Collection
- Paradigm® II Collection
- Bloom® Collection
- The Discovery Collection®
- Entwined® Collection
- Color Anchor Collection (Arc)
- City Hub® Collection



Order & Installation Considerations

- When mixing multiple widths for your projects, sequence rolls on order entry through customer service to minimize dye lot concerns
- It is not recommended to reverse 9' and 12' rolls for installation
- When seaming 6' rolls, match center to center or side to side. Rolls are labeled on back to show edge side. This may require sheets be reversed for 6' heterogeneous products
- All seams must be sealed by either using Mannington Commercial MLG-33 chemical seam sealer or heat welded with Mannington solid color weld rod

Full Roll Sizes

- 6' wide, 30 50 yd²
- 9' wide, 30 75 yd²
- 12' wide, 30 100 yd²

Note: There are cut charges if ordering less than full roll size



What is Attune?

Attune is a 7mm heterogeneous resilient product. Attune is constructed by fusion bonding 2mm heterogeneous sheet to 5mm of vulcanized composition rubber.

Why Specify Attune?

- Superior Ergonomic and Acoustic Benefits
- Availability in a variety of wood and abstract visuals that coordinate back to Realities III, Entwined and Bloom Collections
- Cost-effective sheet flooring solution
- Legacy of performance in rigorous healthcare settings
- Ortho-phthalate and PFAS free construction
- Manufactured in an ISO 9001 and 14001 certified facility
- Optimal solution for infection control spaces
- Slip performance is inherent with Quantum Guard Elite® technology

Design Considerations

- Ergonomics: Attune reduces fatigue from standing and walking through a careful calibration of comfort and support. The result is a true reduction in your experience of joint pain and muscle fatigue.
- Acoustics: Attune offers multiple acoustic benefits to patients and staff in healing environments by reducing in-room sound.
- These visuals add warmth to spaces (less clinical feeling than homogeneous sheet or rubber).
- Attune can be used in concert with LVT and standard heterogeneous sheet.
- Quantum Guard Elite® wear layer allows for no-finish applied maintenance and is found throughout all of our resilient sheet and LVT offerings, further simplifying maintenance concerns.
- Carbon Offset with Appalachian Carbon Exchange: 105% Cradle to Gate equivalent

Sanitary Installation Options

(meets FGI Guidelines)

- IdealBase® meets FGI Guidelines
- IdealBase®: alternate to flash coving. Will need heat welds and cold welds

Seam Installation Options

- Heat Weld: fusing sheets together using a heated vinyl weld rod
- Quantum Guard Elite® Seam Coater Pen: This
 pen is applied over the heat weld to give it the
 same Quantum Guard Elite® coating as the
 floor. Recommended for high traffic areas.





Attune Product Information

- 2mm heterogeneous sheet fusion bonded to 5mm vulcanized composition rubber
- Roll Size: 5'-10" wide x 30LF (175sf)
- 60% post-consumer recycled content by total product weight
- Carbon Offset with Appalachian Carbon Exchange: 105% Cradle to Gate equivalent



Order & Install Considerations

- Heat Weld installation only
- Adhesive Options:
 - o MR-710 (Single Part Urethane)
 - Quickstix Tape for Rubber- 30"x100' rolls (applied on site)
- Compatible with IdealBase
- If using with standard 2mm heterogeneous sheet please note we cannot dye lot match to Attune. Please have your customers plan accordingly.
- Installation Video is available.

Wall Base & Transitions

- Attune can be used with top set wall base and IdealBase.
- IdealBase Installation will require: IdealBase, colored QGE pen, cold weld, and SCU-100 rubber backing material.
 - o SCU-100 comes in 48" x 30LF rolls. Installers will need to cut down for IdealBase install.
- When transitioning to other resilient products please specify the Equalizer Transition 1/4".



What is Homogeneous Sheet?

Homogeneous means a single layer or all made from the same thing. It looks the same from the top, middle, and the bottom. If you cut into it, it looks the same throughout.

Why Specify Homogeneous Sheet?

- Meets monolithic criteria for infection control spaces, per FGI Guidelines
- Cost-effective sheet flooring solution
- Legacy of performance in rigorous healthcare settings, such as operation rooms
- Enhanced slip performance is built into all of our homogeneous sheet products
 - Mannington Assurance III and BioSpec SR are specifically designed for slip resistance
- Ortho-phthalate and PFAS free construction
- Manufactured in an ISO 9001 and 14001 certified facility
- Slip performance is inherent with Quantum Guard Elite® technology

Design Considerations

- In a true homogeneous construction, there are no layers for bacteria to grow if punctured
- Cross-construction visuals: You can get the same look in BioSpec® MD, BioSpec Armor® and BioSpec® SR
- Best floor options for wet areas that pose slip and fall (BioSpec® SR, Mannington Assurance® III)
- Speciality operating rooms with rigorous flooring demands are ideal for BioSpec Armor®
- Great choice for perioperative spaces (spaces that support operating rooms)
- Designed to perform with 2,000PSI static load rating across resilient sheet portfolio
- Quantum Guard Elite® Wear layer allows for no-finish applied maintenance and is found throughout all of our resilient sheet and LVT offerings, further simplifying maintenance concerns
- Carbon Offset with Appalachian Carbon Exchange: 105% Cradle to Gate equivalent

Sanitary Installation Options

(meets FGI Guidelines)

- IdealBase® and flash cove meet FGI Guidelines
- Flash Coved wall base (installed 6" up the wall) creates a more sterile environment. Heat welding required for this installation
 - Additional accessories include: cap strip, cap adhesive, cove stick, and stick adhesive
- IdealBase®: alternate to flash coving. Will need heat welds and cold welds
 - Can be used with <u>BioSpec® SR</u> and <u>BioSpec</u>
 <u>Armor®</u> Be sure to specify the correct toe
 thickness for your project

Seam Installation Options

- Heat Weld: fusing sheets together using a heated vinyl weld rod
- Chemical Weld: chemically bonding 2 sheets together for the life of the floor. Used in all areas that are not required to be heat welded
 - Use MLG-33 Seam Sealer for <u>Mannington</u>
 <u>Assurance</u>[®] <u>III</u>. All other homogeneous
 products use MCS-42.
- Quantum Guard Elite® Seam Coater Pen: This
 pen is applied over the heat weld to give it the
 same Quantum Guard Elite coating as the floor.
 Recommended for high traffic areas



Color Anchor (Prism) - Scottish Thistle 15429, Hummingbird 15430, Buzzy Bee 15432, Zucca 15431 BioSpec® MD - Granite 15425, New Glacier 15364, Talpa 15418



Mannington Commercial Homogeneous Collections

- BioSpec® MD
- BioSpec Armor®
- BioSpec® SR
- Mannington Assurance® III
- Color Anchor Collection (Prism)



Order & Installation Considerations

- Sequence rolls on order entry through customer service to minimize dye lot concerns.
- Each roll must be installed in sequential order.
 Reverse sheets for seaming. Directional arrows are applied to the back of sheet for proper placement.
- All seams must be sealed by either using Mannington Commercial MLG-33 seam sealer (Mannington Assurance® III), MSC-42 seam sealer (BioSpec Armor®, BioSpec® MD, BioSpec® SR, & Color Anchor Collection (Prism)), or heat welded with Mannington solid color weld rod

Full Roll Sizes

- 6' 6" wide
 - 30 72 yd²
 - 30-58 yd² (BioSpec Armor[®] only)

Note: There are cut charges if ordering less than full roll size. Dye lot maximum for homogeneous products is 1,000SY.

Installation Resources

Installation Guidelines

Heterogeneous Sheet Flooring Installation Guidelines

Attune Installation Guidelines

Homogeneous Sheet Flooring Installation Guidelines

High Moisture Flooring Solution Guide

Installation Blog Articles

How To Choose The Right Adhesive For Your Flooring Type

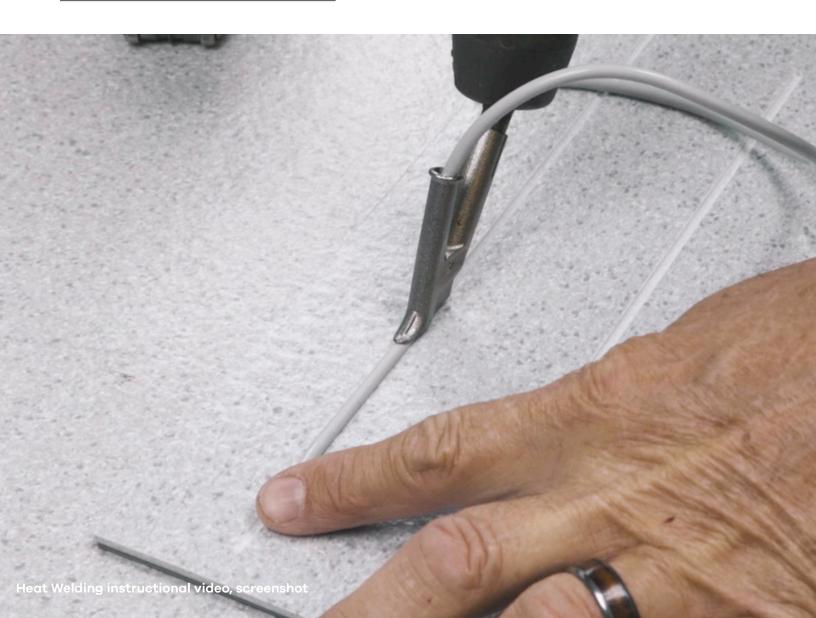
Heat Welding vs. Chemical Welding Resilient Flooring

How to Avoid the Most Common Mistakes in Commercial Resilient Sheet Vinyl Installations

5 Key Factors of a Successful Subfloor Prep

Three Key Factors for a Successful Healthcare Flooring Installation

How Does Slab Moisture Affect Flooring



Adhesives

	MoistureLoc Sheet adhesive	M-Guard V-88 adhesive	V-95 (2 Part Epoxy)	XpressStep® Adhesive	QuickStix® for Sheet
Highlights	Best for conditions such as: heavy rolling loads, point loads, operating rooms, under hospital beds, any area subject to dragging force, direct sunlight or where topical moisture would be a concern. Can be stored and used on other projects at a later date.	*NOT approved for heavy point loads* Best for corridors or other areas where hospital beds won't be sitting for extended time.	Best for conditions such as: heavy rolling loads, point loads, operating rooms, under hospital beds, any area subject to dragging force, direct sunlight or where topical moisture would be a concern. Can be used in select areas for high performance bordering adhesives like V-88 to optimize cost/performance on install	For immediate use- best for occupied spaces that need a quick turn around Can heat weld same day Approved for rolling loads There are Winter packs that are to be used October 1- April 15	100 yd² Minimum Order per color High moisture peel and stick installation; must have vapor retarder Quick access post installation, can occupy floor immediately rather than wait 48-72 hours Primer required With Moisture Resistant Primer: pH 12 With Premium Universal Primer: RH%: 95, MVER 10lbs, pH 12 Addtional lead time needed
No Vapor Barrier (existing slabs)	RH 95%, MVER: 10lbs, pH 12	RH 90%, MVER: 10lbs, pH 10	•	•	•
Intact Vapor Barrier (new slabs)	pH 12	RH 95%, MVER: 10lbs, pH 12	•	•	•
Slab Condition	•	•	RH: 85%, MVER: 5lbs, pH 9	RH 95%, MVER: 8lbs, pH 11	•
Coverage: Porous	2GL Pail - 500 ft²/ GL Trowel: 1/16 x 1/32 x 1/32 "U" Notch	1GL Pail - 250 ft²/ GL 4GL Pail - 1,000 ft²/ GL Trowel: 1/16 x 1/32 x 1/32 "U" Notch	1GL Pail – 185-245 ft²/ GL Trowel: 1/16 x 1/32 x 1/32 "U" Notch	150/can Shake well prior to use Spray while walking slowly; do not use sweeping arm motion	•
Coverage: Non-Porous	2GL Pail - 700 ft²/ GL Trowel: 1/16 x 1/32 x 5/64 "U" Notch	1GL Pail - 350 ft²/ GL 4GL Pail - 1,400 ft²/ GL Trowel: 1/16 x 1/32 x 5/64 "U" Notch	•	185/can Shake well prior to use Spray while walking slowly; do not use sweeping arm motion	•
Shelf Life	1 year	1year	1 year *but once adhesive is opened it must be used right away	3 years	18 months
Additional Resources	MoistureLoc Adhesive Specification MoistureLoc Adhesive SDS	M-Guard V-88 Adhesive Specification M-Guard V-88 SDS	V-95 Adhesive Specification V-95 SDS	XpressStep® LVT & Sheet - Installation XpressStep® LVT & Sheet - Specification XpressStep® LVT & Sheet - SDS XpressStep® LVT & Sheet - Warranty	QuickStix® Resilient Sheet Installation QuickStix® Specification QuickStix® SDS QuickStix® Resilient Sheet Warranty QuickStix® Sell Sheet

Attune Adhesives

	MR710 (single part urethane)	Quickstix for Rubber
Highlights	Premium Urethane adhesive - Single component premium urethane adhesive Use with Attune only, this is not approved for other sheet vinyl products Ready to use, no mixing required	This is to be used with Attune only. Premium Universal Primer Required. Applied on site.
Intact Vapor Barrier (new slabs)	RH 90%, MVER: 8lbs, pH 9	•
Slab Condition	•	•
Coverage:	190sf/ 2 gal	250
Shelf Life	1 year	2 years
Additional Resources	MR710 Specification MR710 SDS	QuickStix Tape for Rubber Specification QuickStix for Rubber SDS

Seam Sealers and Welds

There are 2 options for chemical weld sheen levels.

Please read notes for each seam sealer to ensure you make the right selection for your products.

	MCS-42 Seam Sealer	MLG-33 Seam Sealer	VST-96- Bottle for Seam Sealer	Weld Rods	Quantum Guard Elite® Seam Coater Pen
Highlights	Used for chemical welds (when you are not heat welding) 1 part sealer, no mixing required Higher Sheen, smooth products to be used with: BioSpec® MD/ BioSpec® SR/BioSpec Armor®, Color Anchor (Prism)	Used for chemical welds (when you are not heat welding) 2 part sealer, need to mix solution together Low Sheen to be used with: Mannington Assurance® III, Bloom®, City Hub®, Color Anchor (Arc), Entwined®, Paradigm® II	Must be ordered with MCS- 42 for application of the seam sealer	There are 2 thickness for weld rods, the standard is 4mm. The 6mm is for replacing old welds only, meaning you are keeping the floor installed but repairing/replacing the weld rod seam. Helps to fill voids and fix bad seams.	Recommended for high traffic areas & Healthcare settings. Do not over apply onto the Quantum Guard Elite® layer of Sheet Vinyl. This pen gives the seam the same Quantum Guard Elite coating as the vinyl flooring.
Coverage: Porous	1 pint/ 12 pints CTN 400-600 lineal feet/pint	10z can/ (6) 1 oz cans CTN 70 lineal feet per kit	4 oz bottle 1 bottle/ 6 bottles CTN	4mm: 165 LF per spool 6mm: 100 LF per spool- specialty item, we do not stock this.	1 Pen: 300 LF coverage Carton: 6 Pens - 1,800 LF coverage
Additional notes	*Need to order the VST- 96 bottle for application. *Installation instructions- need to wipe off as you apply.	*Bottle for application included, no need to order VST-96. *Installation instructionsdo not wipe this off because it will smear on textures	*Tip on bottle helps to insert into the seam to allow chemical seam sealer to go into it. This is a Mannington specific installation requirement. Competitors apply seam sealer on top.		
Additional Resources	MSC-42 Specification & Installation MSC-42 SDS	MLG-33 Specification MLG-33 SDS		Weld Rod Installation Video Weld Rod Specification Weld Rod Chart Heat Welding Gun Urethane Tips	Quantum Guard Elite Seam Coater Pen Quantum Guard Elite Seam Coater Pen SDS

Maintenance Resources

With a long history of resilient manufacturing, Mannington Commercial's maintenance expertise is second to none. We have a dedicated team whose main focus is the performance and maintenance of our resilient products, which is very unique for the industry. A key selling point of Mannington's resilient products is the use of Quantum Guard Elite® technology utilized across our resilient platform. Having this finish across both LVT & Sheet, allows you to have a single maintenance plan.

Maintenance Guidelines & Videos

Mannington Commercial Maintenance Guidelines

Quantum Guard Elite Maintenance Video

Quantum Guard Pro Maintenance Video (for City Hub Collection only)

Stain Test Chart

Maintenance Blog Articles

7 Steps to Clean and Maintain Commercial Hard-Surface Flooring

How to Maintain Your Commercial Flooring All Year Round

How To Clean Luxury Vinyl Tile and Sheet Vinyl

Swiffer Wet Mop Vs. Contec Premira

Cleaning and Disinfecting Hard Surface Floors In The Age of COVID-19: What You Need to Know

How to Maintain Commercial Flooring in Winter Weather



Glossary

<u>Cold Weld</u>: represents the use of an applied product that "fills" the gap between two installed products. Cold weld is used with <u>IdealBase®</u> on vertical seams.

Chemical Weld: A chemical component that creates a sealed bond that is as strong as the surface of the floor covering meant to remain in tact for the life of the floor.

Flash Coving: the process in which resilient sheet is bent and adhered to the wall as a base.

<u>Heterogeneous Sheet</u>: Sheet product that is layered or of multiple types. In this type of product, each of the layers looks a bit different.

Heavy Point Loads: a consistent force is applied at a single or several single points on the floor. Ex. Hospital Beds

<u>Homogeneous Sheet</u>: Sheet product made from a single layer or all made from the same thing. It looks the same from the top, middle, and the bottom. If you cut into it, it looks the same throughout.

Heat Weld: the act of fusing resilient sheets together with a heated thermal (vinyl) weld rod.

Perioperative Spaces: these are support spaces for operating rooms that are 2-3X more SF than the operating rooms. These spaces include: corridors, PACU, Supply chain, equipment room, staff support, scrub room & other operating room support spaces.

Additional Resources

Design

How Resilient Sheet Flooring is Designed and Printed

How to Choose the Best Flooring Colors For a Healthcare Space

What is Biophilic Design in Commercial Healthcare Settings

Flooring Basics

What is Resilient Flooring?

Four FAQS About Resilient Flooring

Heterogeneous vs. Homogeneous Construction

Benefits of Made in America Flooring

Segments

A Guide To Understanding the Fundamentals of Healthcare Flooring

Top Ten Decisions to Make When Selecting Healthcare Flooring

Best Flooring Choices for Operating Rooms

Designing Hospital Patient Rooms: 4 Tips for Choosing the Right Product

Designing a Colorado NICU: Thoughtful Design in Healthcare

Specifying Healthcare Floors Through Evidence-Based Approach

How to Use The FGI Guidelines

Why the FGI Guidelines Are Important

Senior Living and Patient-Centered Care Models in a Post- Covid-19 World

7 Trends Shaping the Future of Senior Housing

How to Design Senior Living Facilities That Support The Aging Population

