



LAYING PATTERNS BOOK

 **LANDMARK**
CERAMICS



A new **landmark** in the ceramic industry

Landmark Ceramics is an American company, based in Tennessee that has set out to research, manufacture and sell top quality porcelain ceramics in North America, taking advantage of the proven experience of the Gruppo Concorde, an international leader in the sector. Technological innovation, market presence, attention to detail, the welfare of people and the environment, efficient service and a thorough product range make Landmark a new benchmark in the North American market for those who are looking for a reliable partner for any building and architecture project using US made top quality porcelain tiles.

The background of the right page is a photograph of a dining table with a herringbone tile pattern floor. The table is set with a white plate, silverware, and a glass. A white chair is visible in the background. The tiles are in shades of grey and brown, creating a geometric pattern.

LAYING PATTERNS BOOK

Landmark "**Laying Patterns Book**" is a collection of installation solutions, from the most original and refined to the most classic, designed to help you choose the layout patterns for your spaces whether they use a single format or a combination of different sizes. The patterns are proposed both for tiles of traditional thickness and for the 3/4" - 20mm slabs of the Frontier20 range, meeting all your needs for indoor and outdoor applications.



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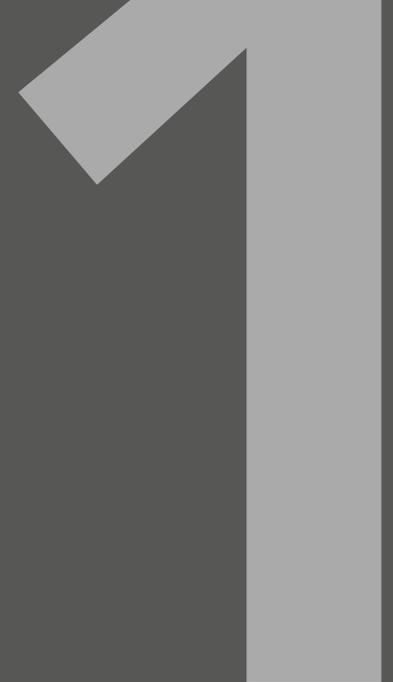
3

PORCELAIN TILE PERFORMANCE DATA

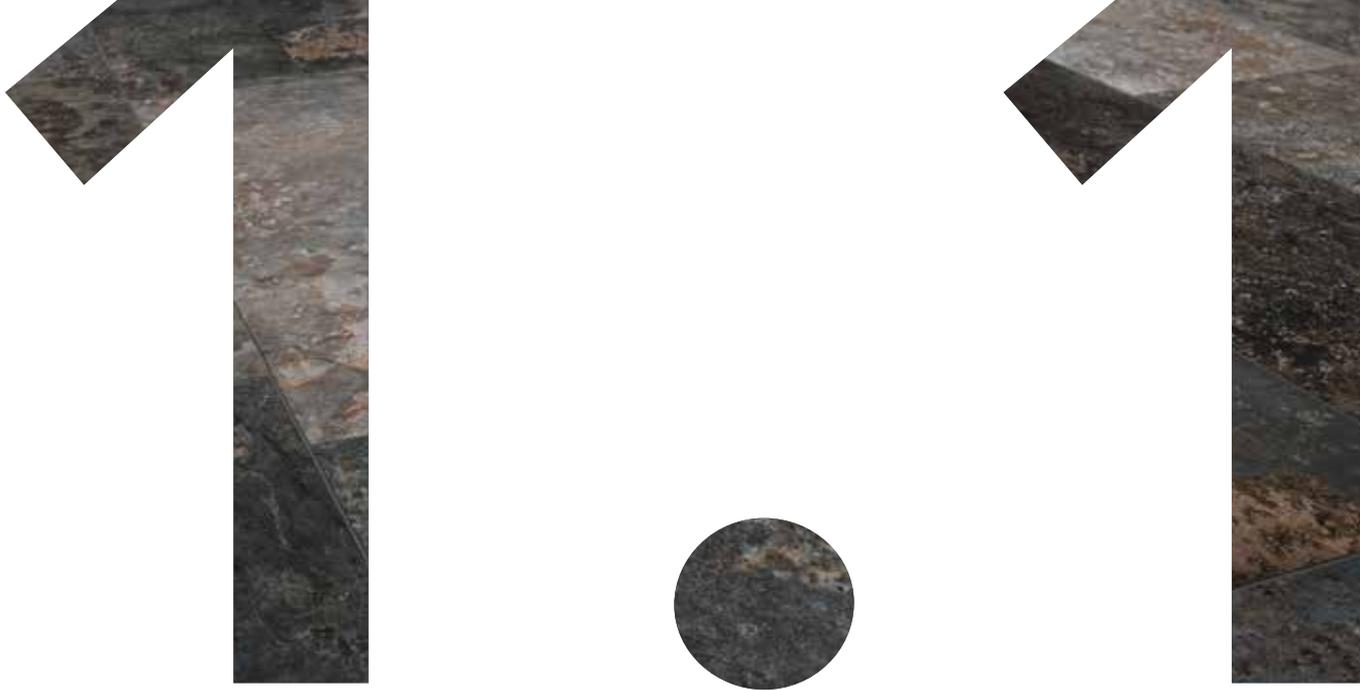
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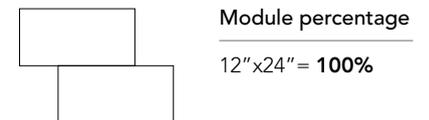
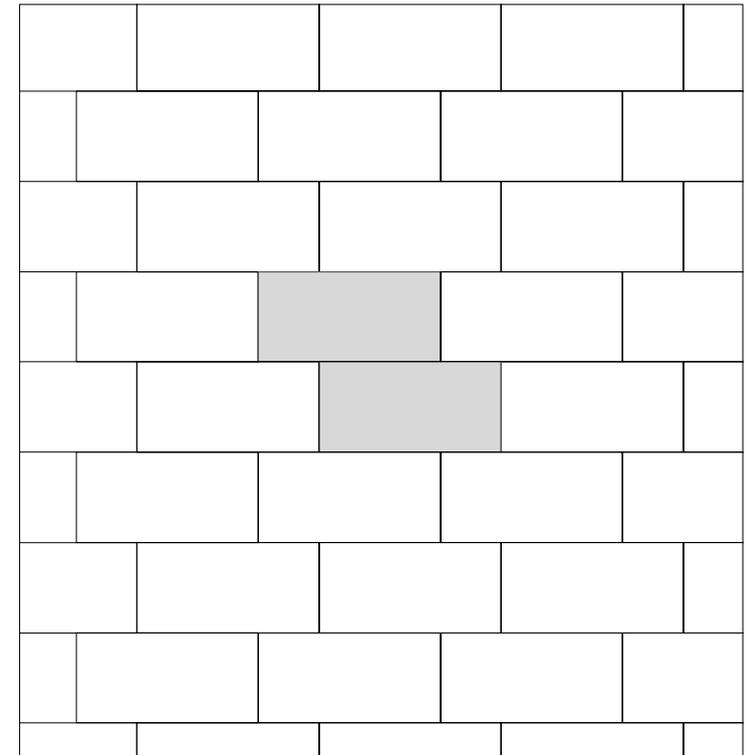
LAYING PATTERNS FOR
LANDMARK AND LANDMARK
CONTRACT COLLECTIONS



In this chapter you will find all the **single-size** laying patterns that can be created with 9mm Landmark Products.

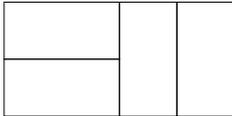
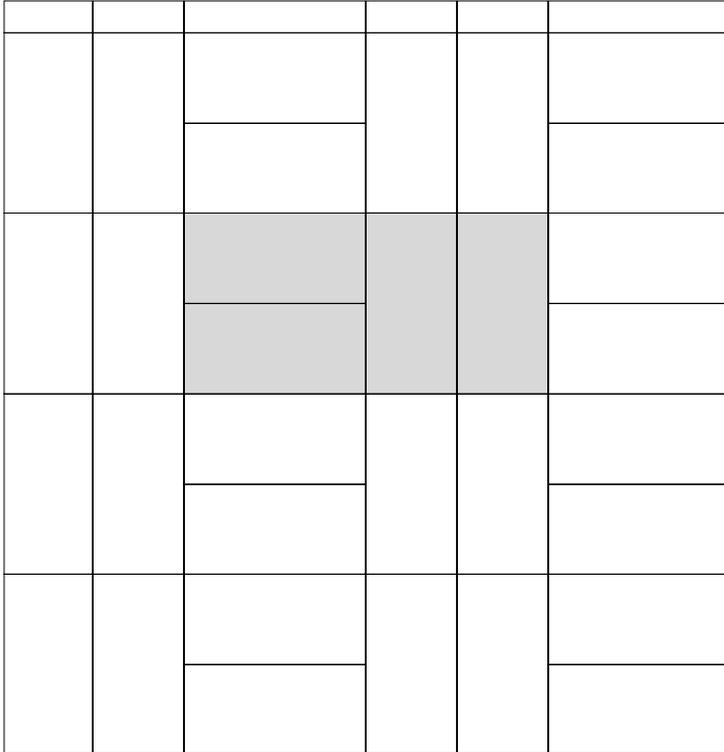


LAYING 12"x24" ONE



Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 12"x24" TWO



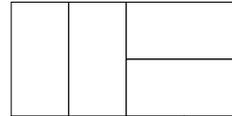
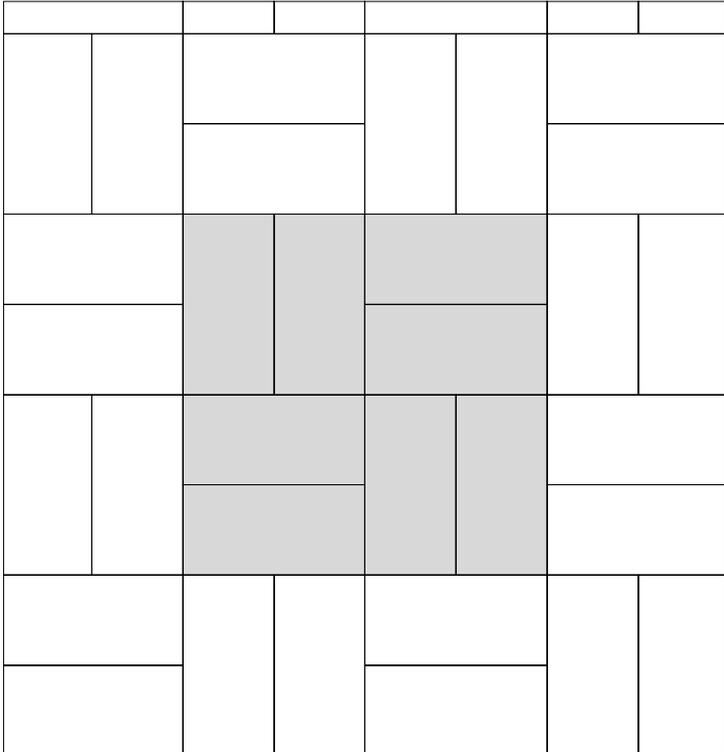
Module percentage
12"x24" = 100%



Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8")



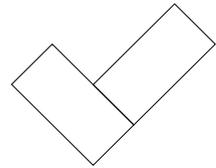
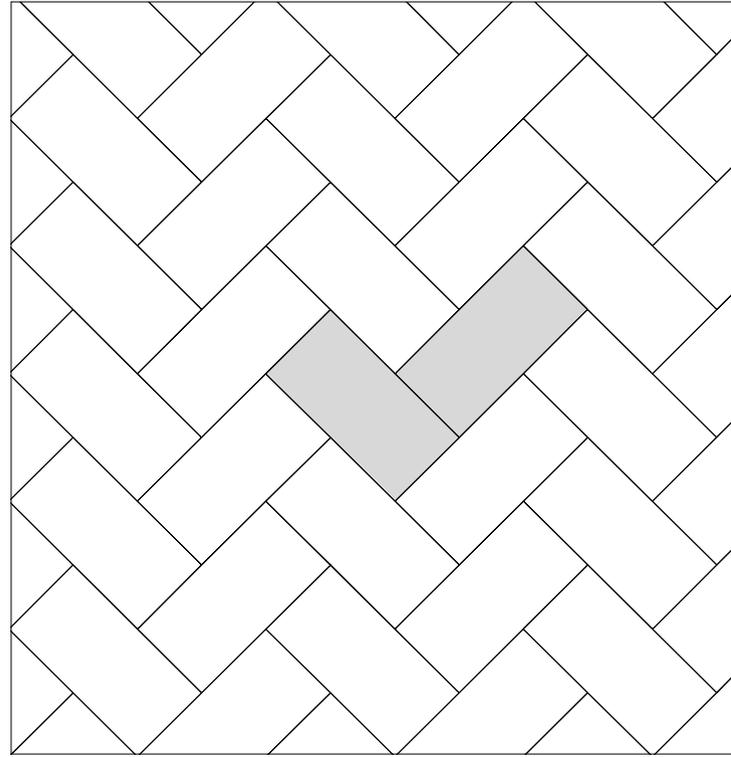
LAYING 12"x24" THREE



Module percentage
12"x24" = 100%

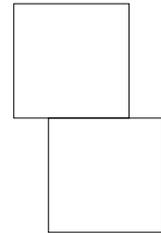
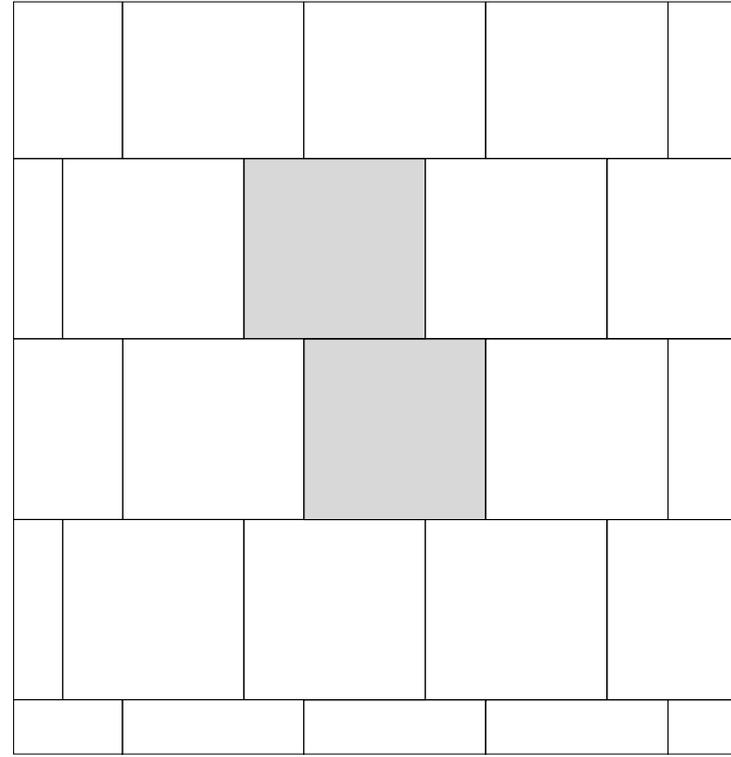
Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8")

LAYING 12"x24" FOUR



Module percentage
12"x24" = 100%

LAYING 24"x24" ONE



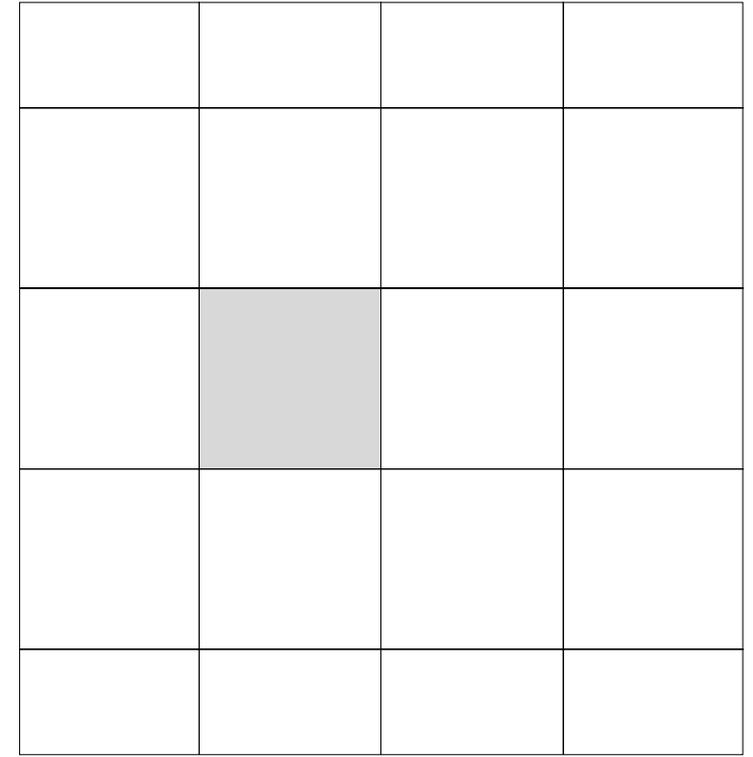
Module percentage
24"x24" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").



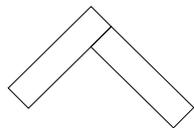
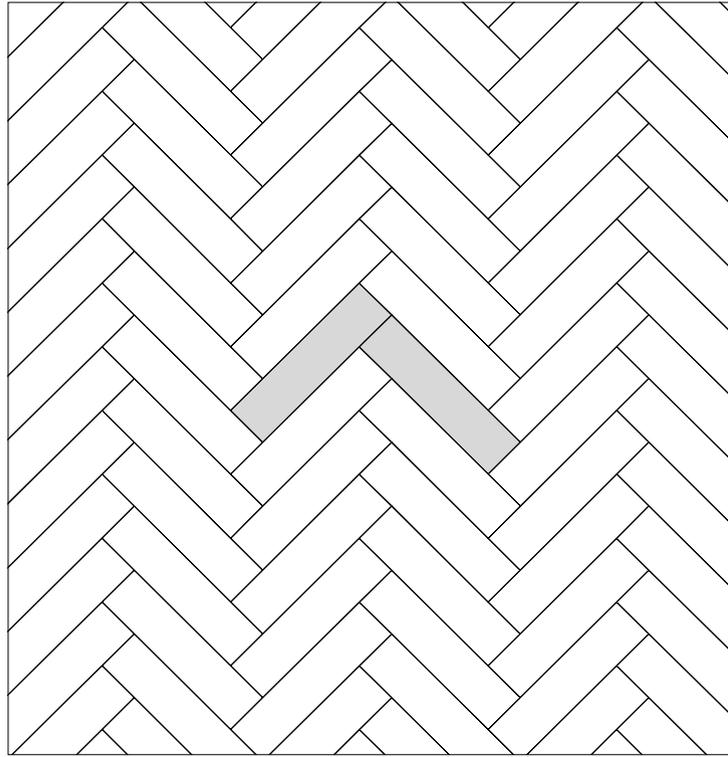
LAYING 24"x24" TWO



Module percentage
24"x24" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 6"x24" ONE



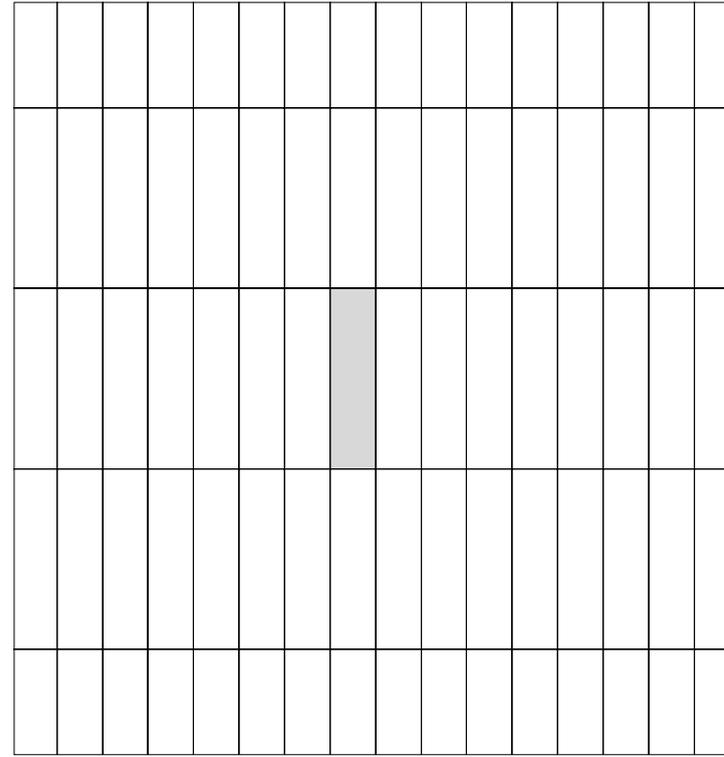
Module percentage

6"x24" = 100%



Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 6"x24" TWO

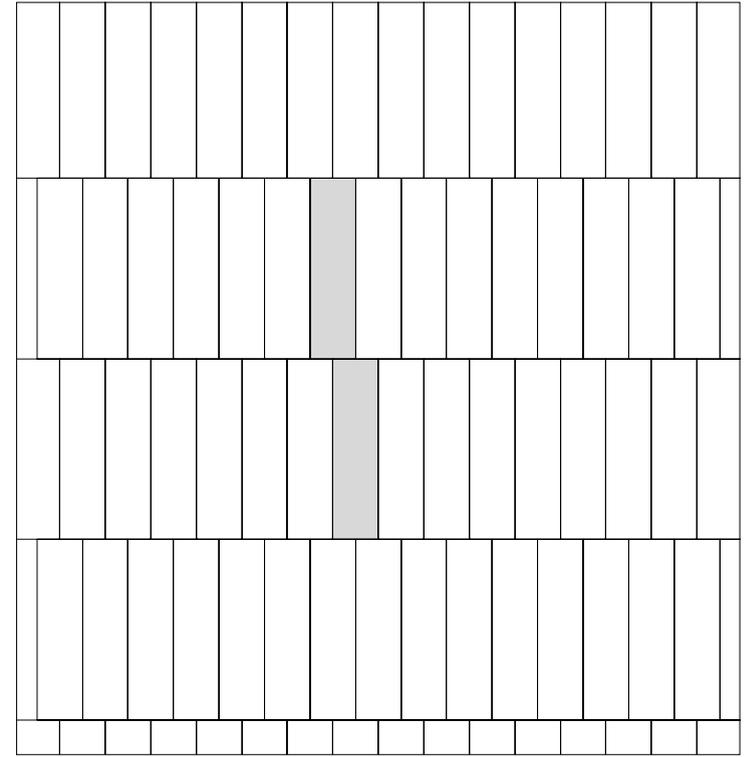


Module percentage

6"x24" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 6"x24" THREE

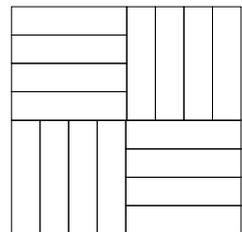
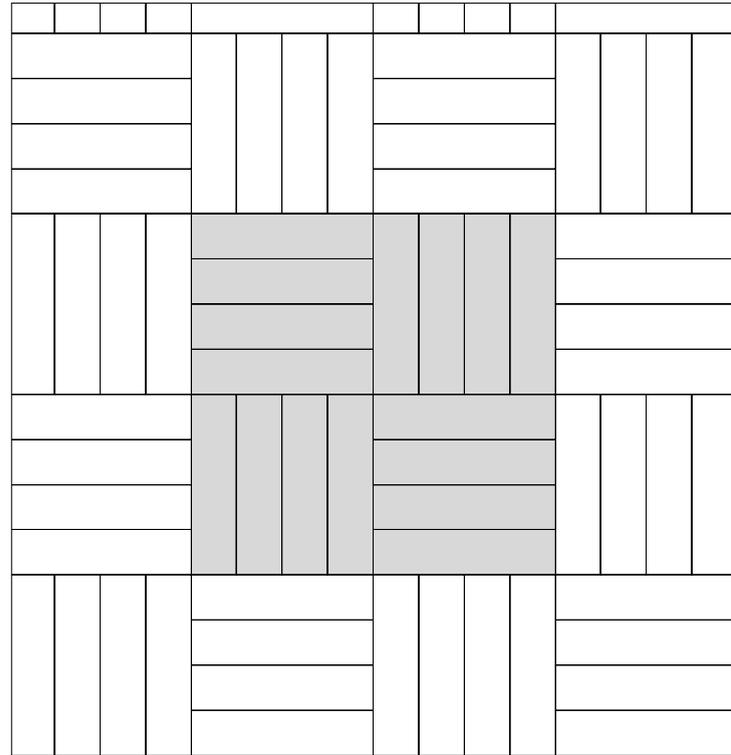


Module percentage

6"x24" = 100%

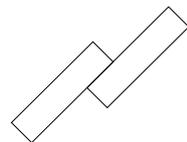
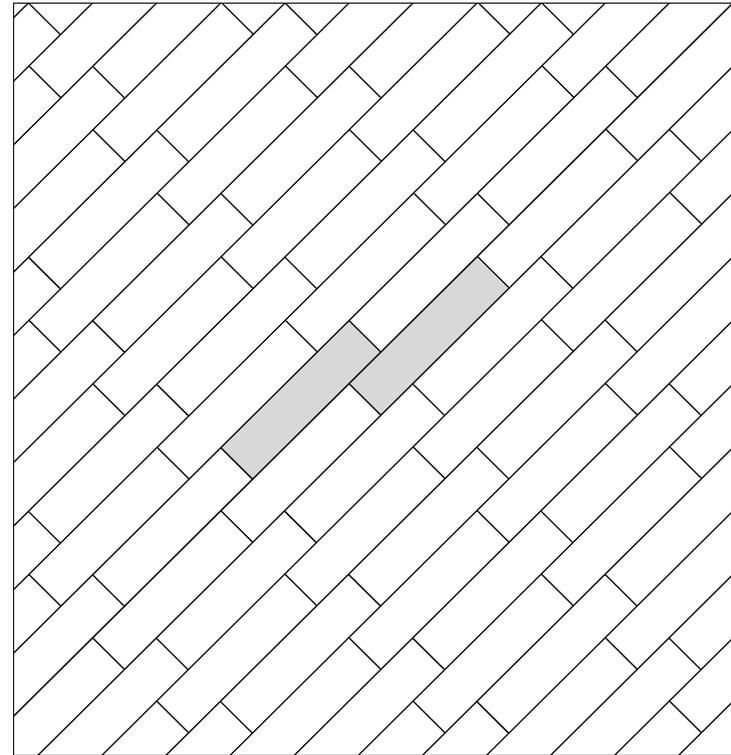
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 6"x24" FOUR



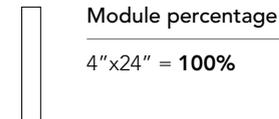
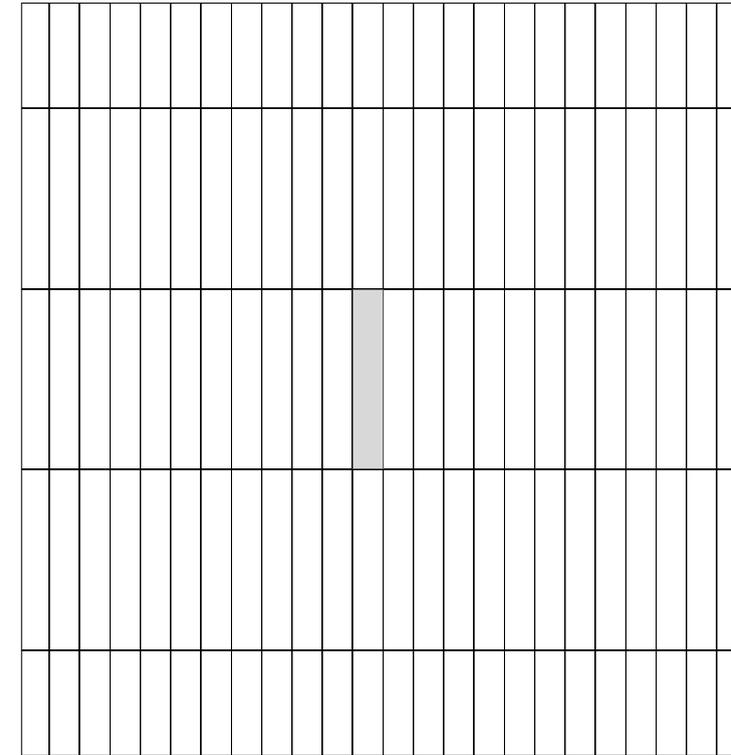
Module percentage
6"x24" = 100%

LAYING 6"x24" FIVE



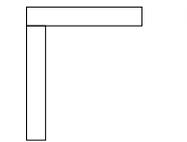
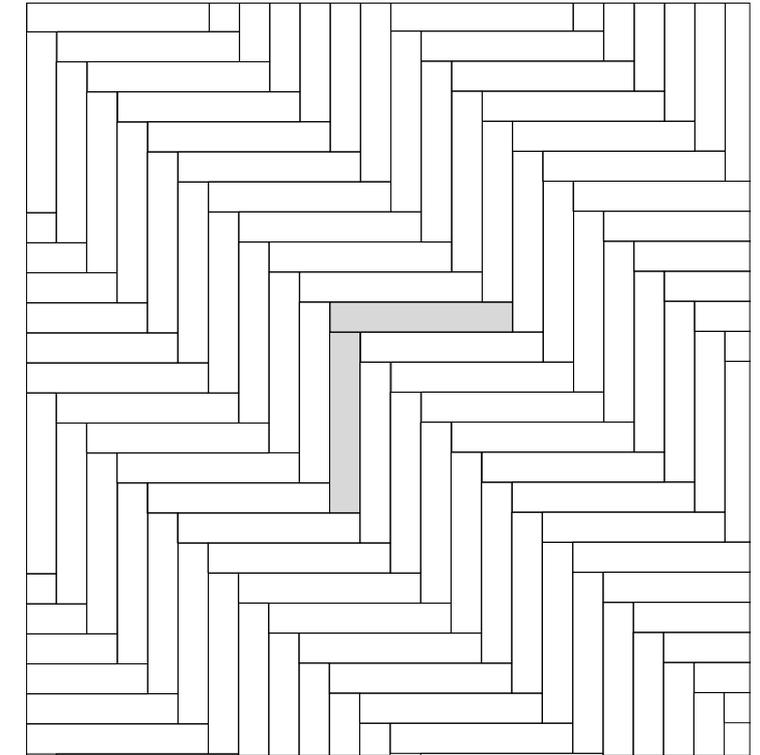
Module percentage
6"x24" = 100%

LAYING 4"x24" ONE



Module percentage
4"x24" = 100%

LAYING 4"x24" TWO



Module percentage
4"x24" = 100%

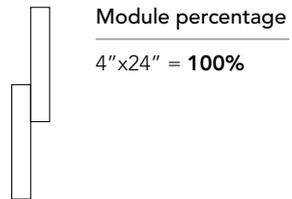
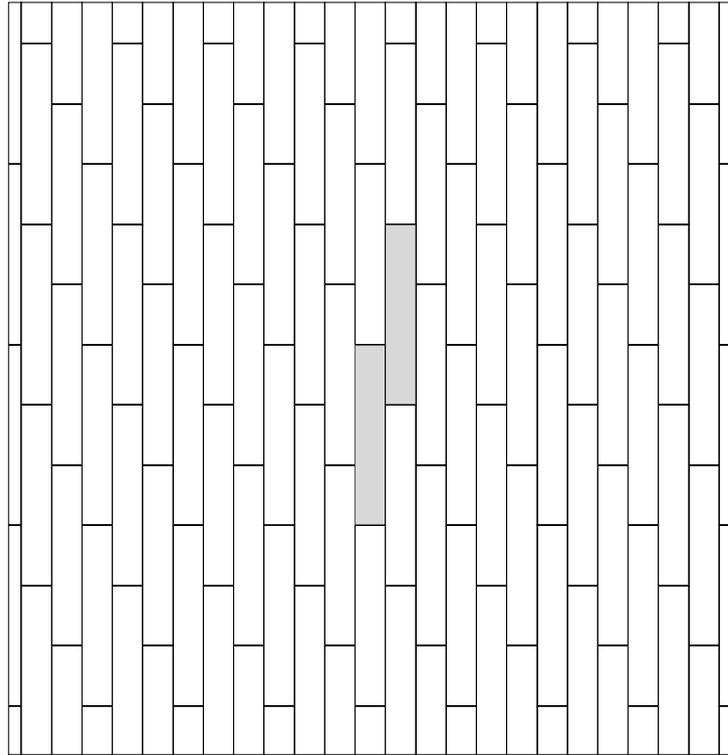
Note: installation possible with rectified material with joint of 2mm (approx 5/64") . Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

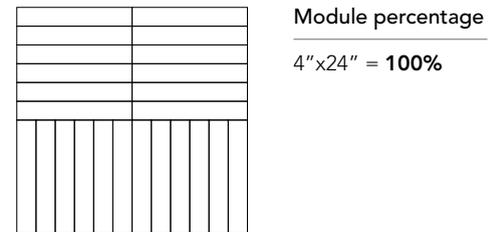
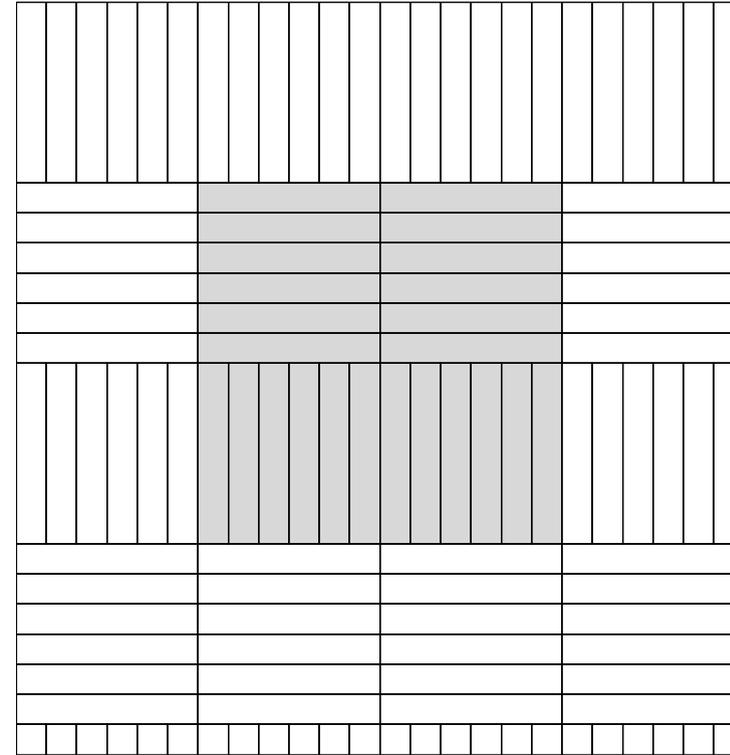
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 4"x24" THREE



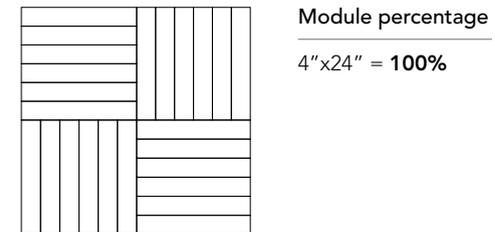
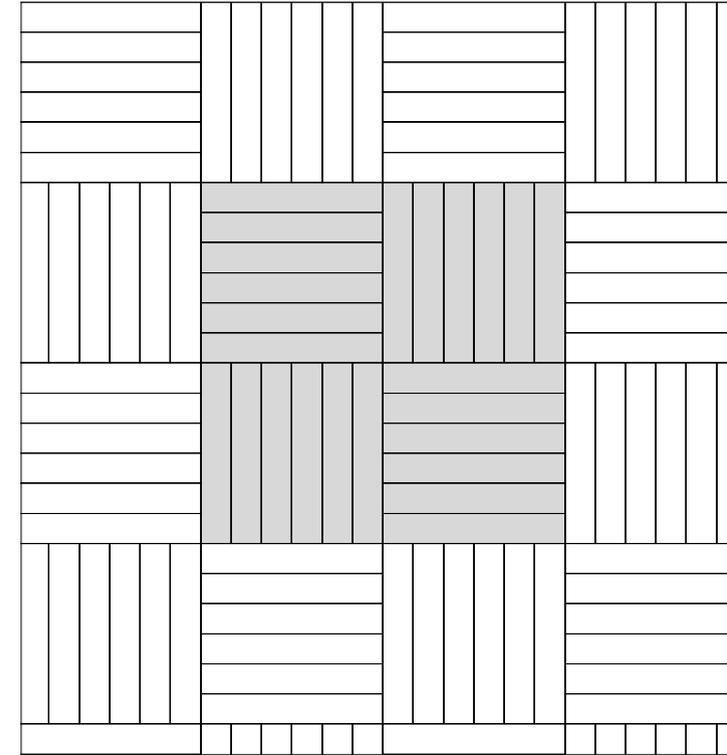
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 4"x24" FOUR



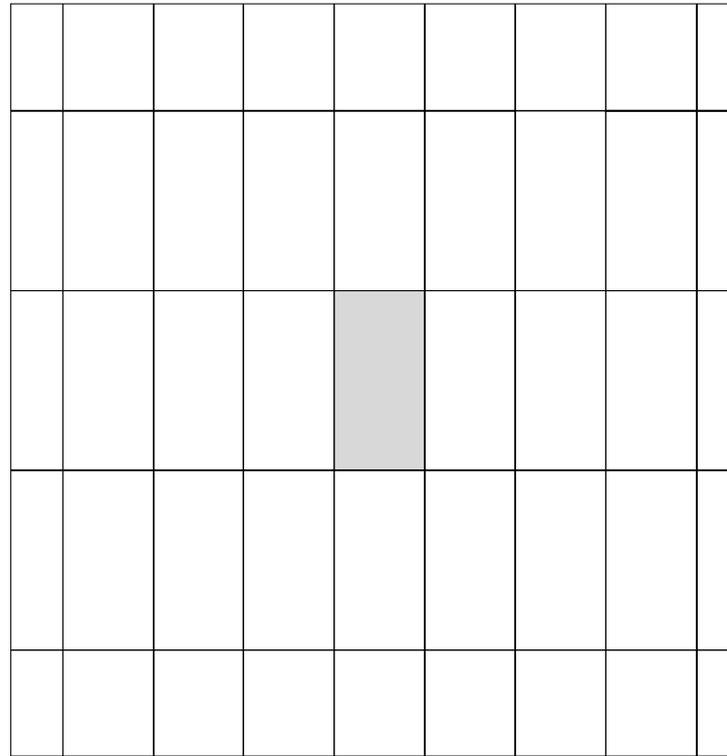
Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").

LAYING 4"x24" FIVE



Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").

LAYING 18"x36" ONE



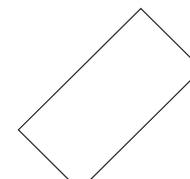
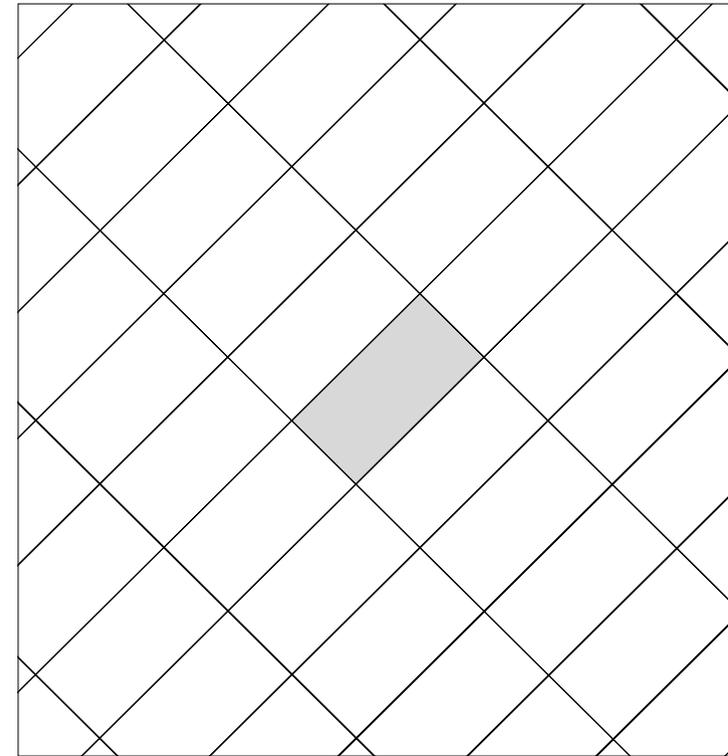
Module percentage

18"x36" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").



LAYING 18"x36" TWO

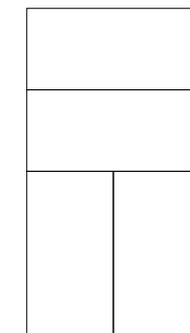
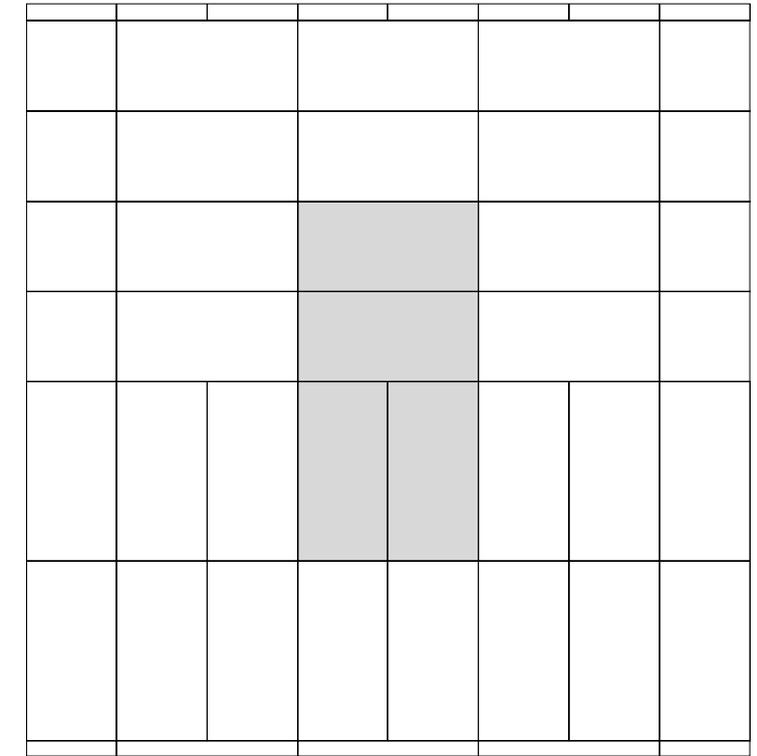


Module percentage

18"x36" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 18"x36" THREE

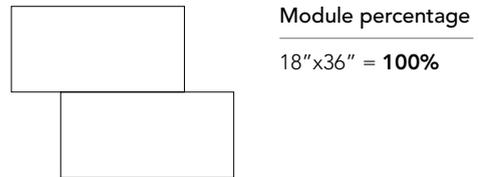
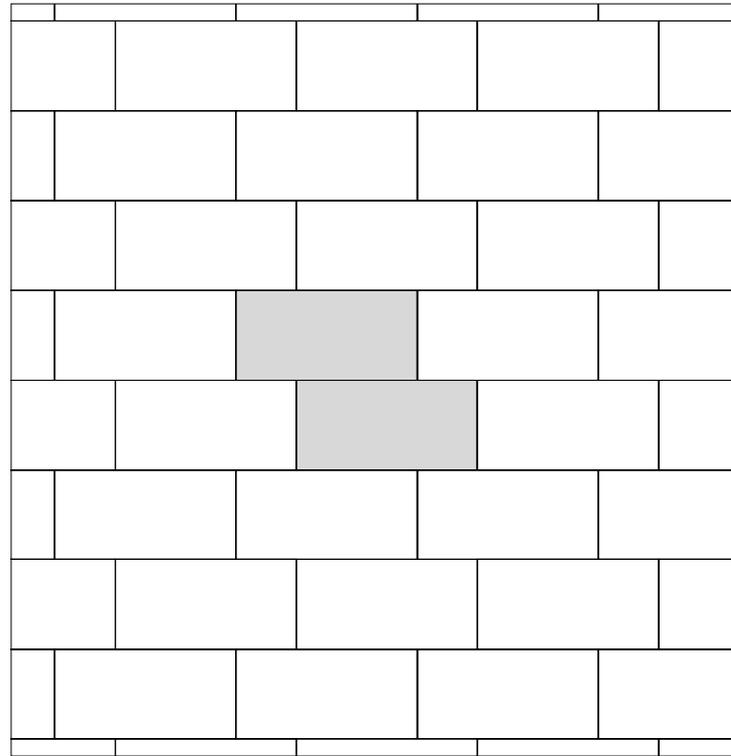


Module percentage

18"x36" = 100%

Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").

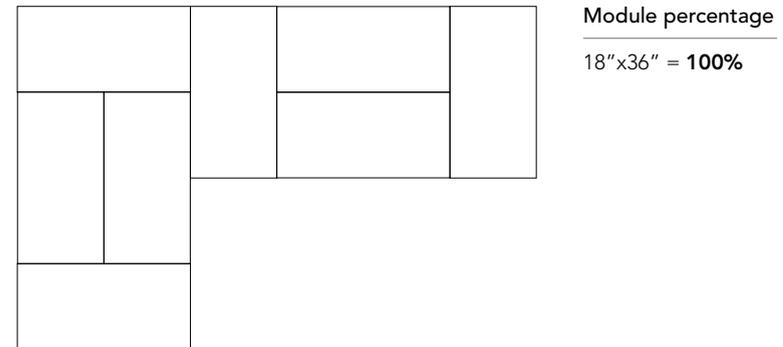
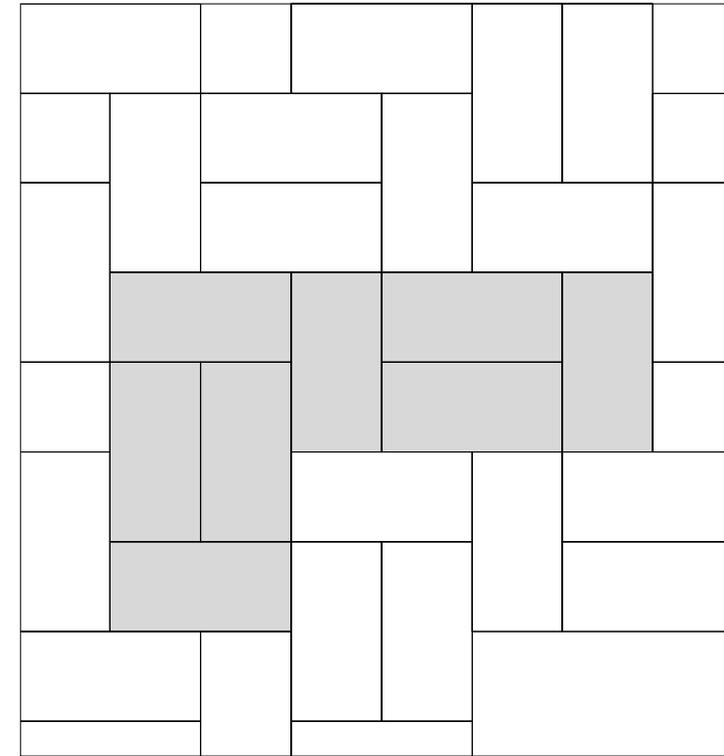
LAYING 18"x36" FOUR



Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

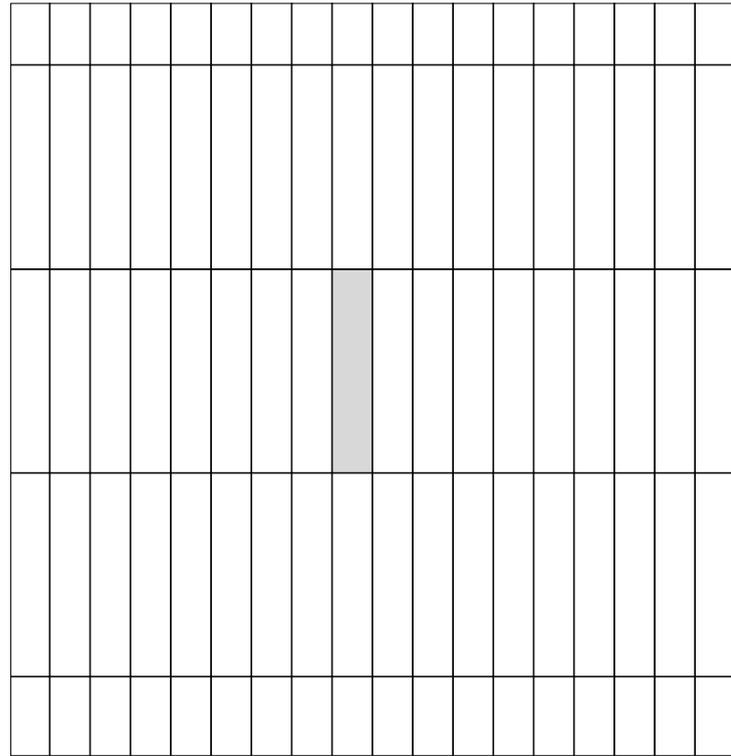


LAYING 18"x36" FIVE



Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").

LAYING 8"x40" ONE

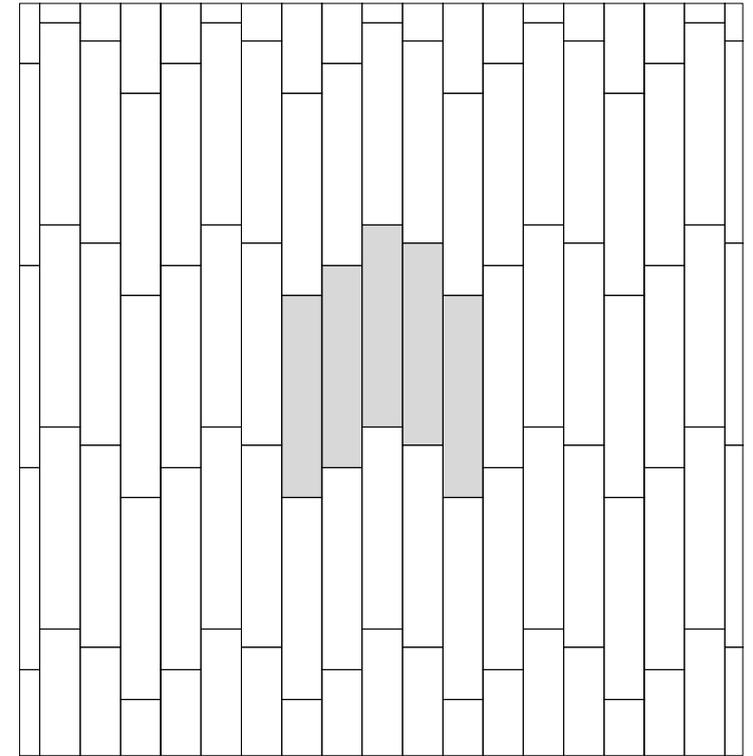


Module percentage
8"x40" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").



LAYING 8"x40" TWO

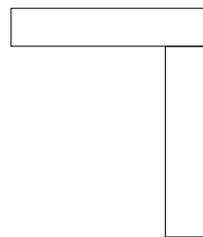
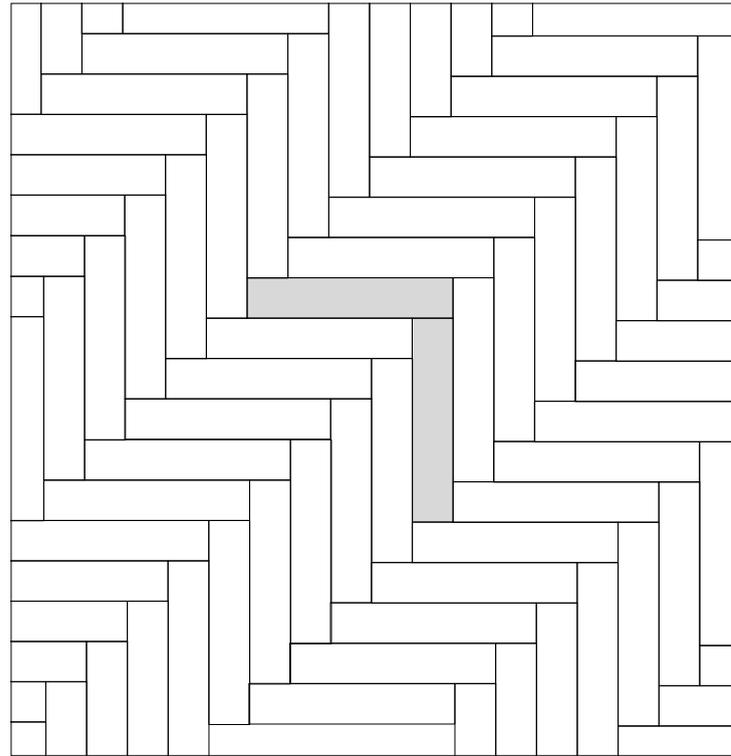


Module percentage
8"x40" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").



LAYING 8"x40" THREE



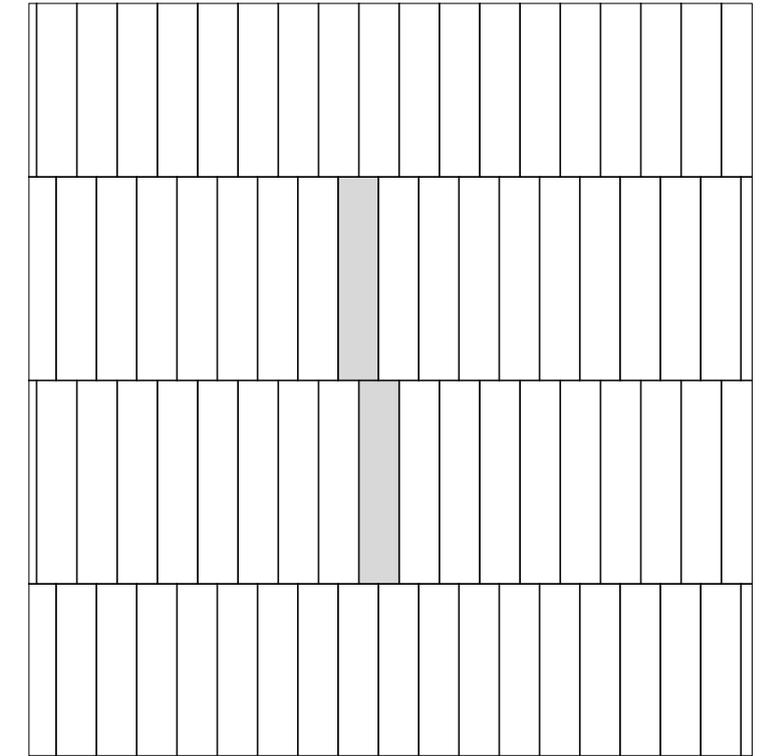
Module percentage

8"x40" = 100%



Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 8"x40" FOUR



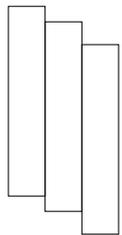
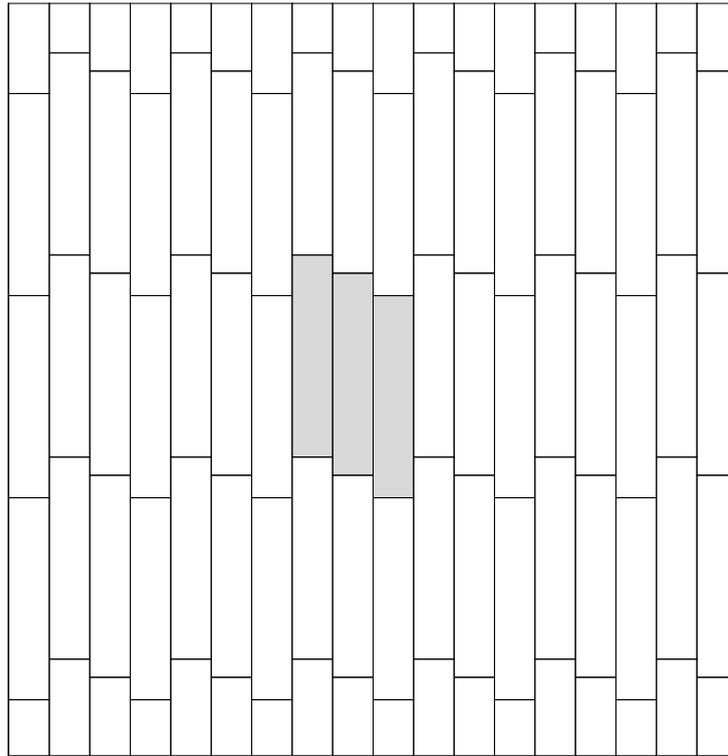
Module percentage

8"x40" = 100%



Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 8"x40" FIVE



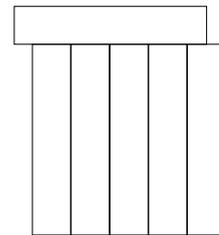
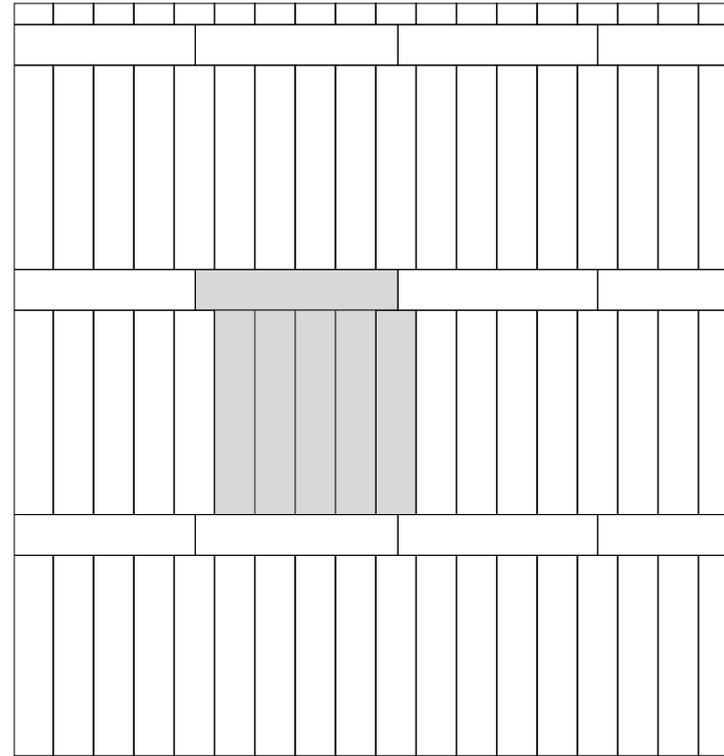
Module percentage

8"x40" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").



LAYING 8"x40" SIX



Module percentage

8"x40" = 100%

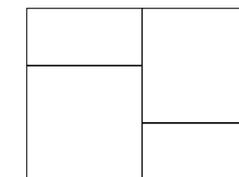
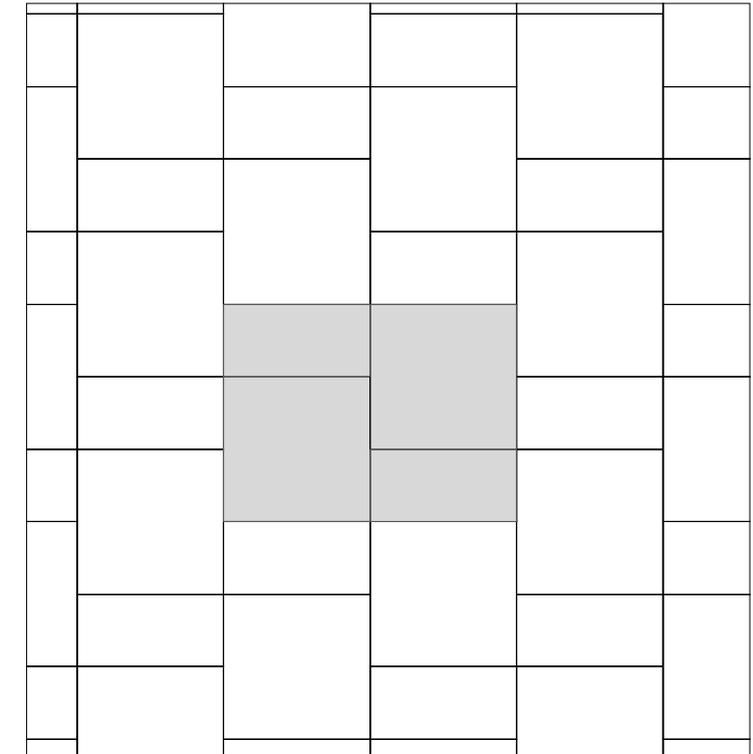
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").



In this chapter you will find all the **two-sizes** laying patterns that can be created with 9mm Landmark Products.



LAYING 24"x24"- 12"x24"

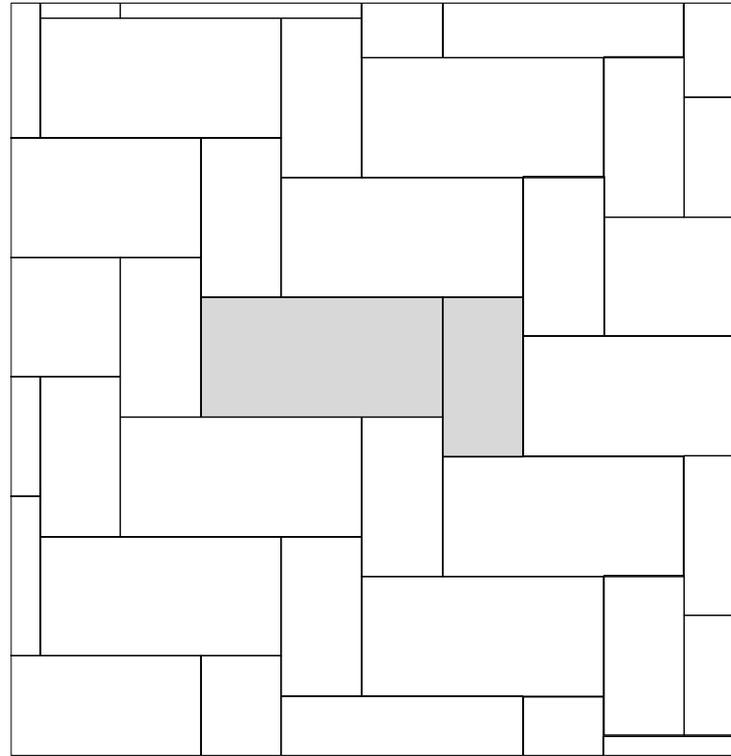


Module percentage

24"x24" = **66.7%**
 12"x24" = **33.3%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

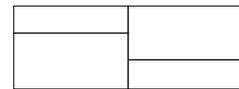
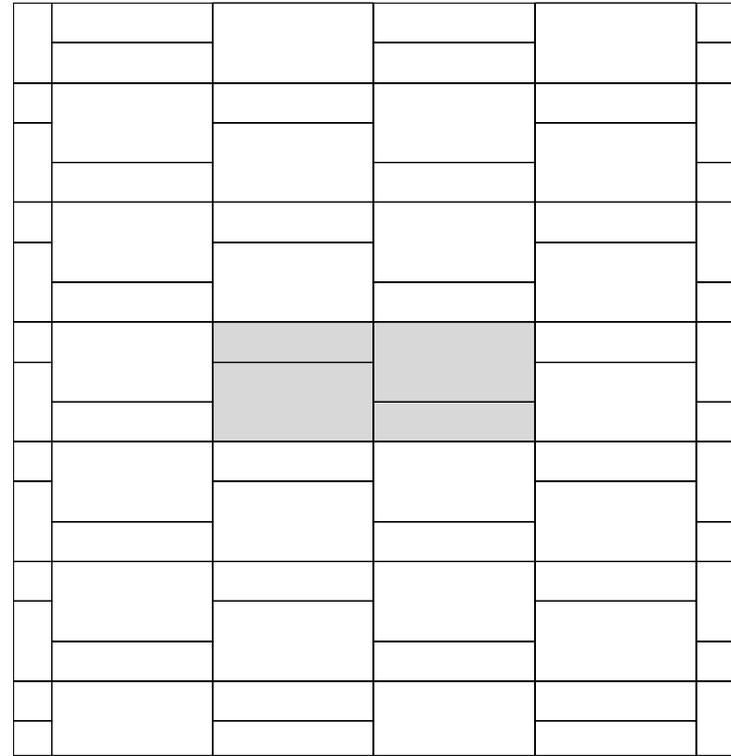
LAYING 12"x24"- 18"x36"



Module percentage

12"x24" = **30.8%**
18"x36" = **69.2%**

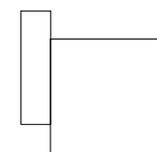
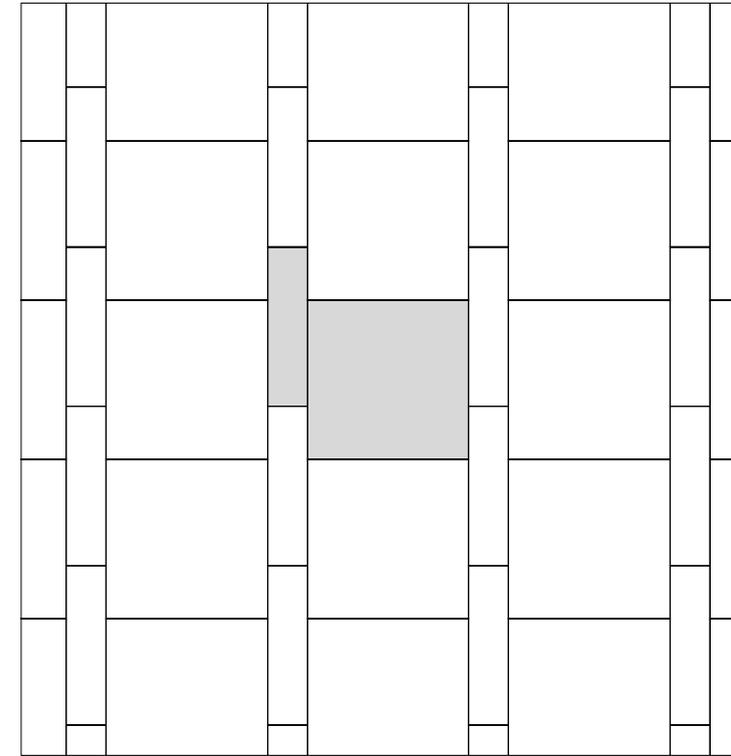
LAYING 6"x24"- 12"x24"



Module percentage

6"x24" = **33.3%**
12"x24" = **66.7%**

LAYING 6"x24"- 24"x24"



Module percentage

6"x24" = **20%**
24"x24" = **80%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

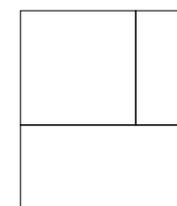
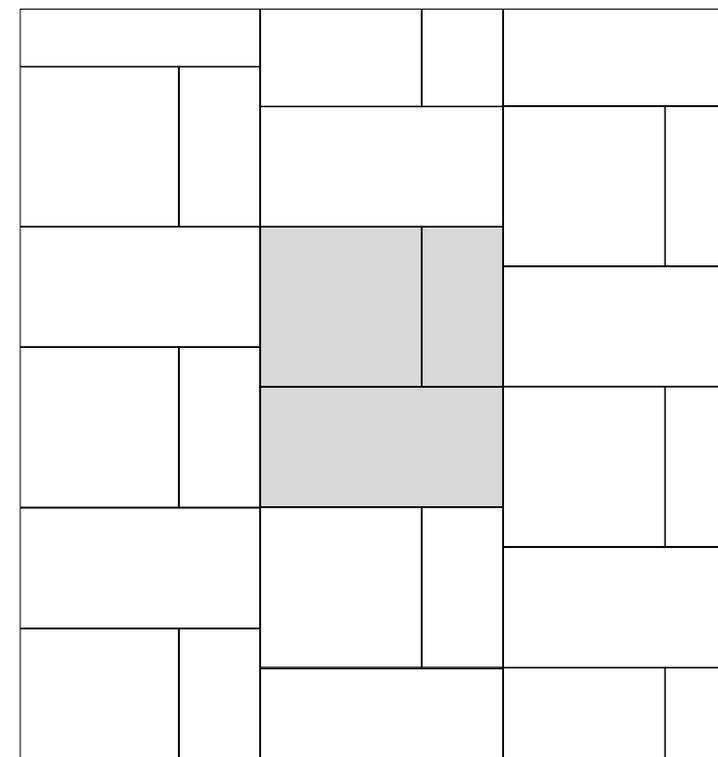
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").



In this chapter you will find all the **three-sizes** laying patterns that can be created with 9mm Landmark Products.

LAYING 24"x24"- 12"x24" - 18"x36" ONE

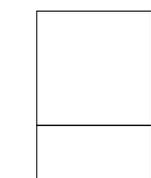
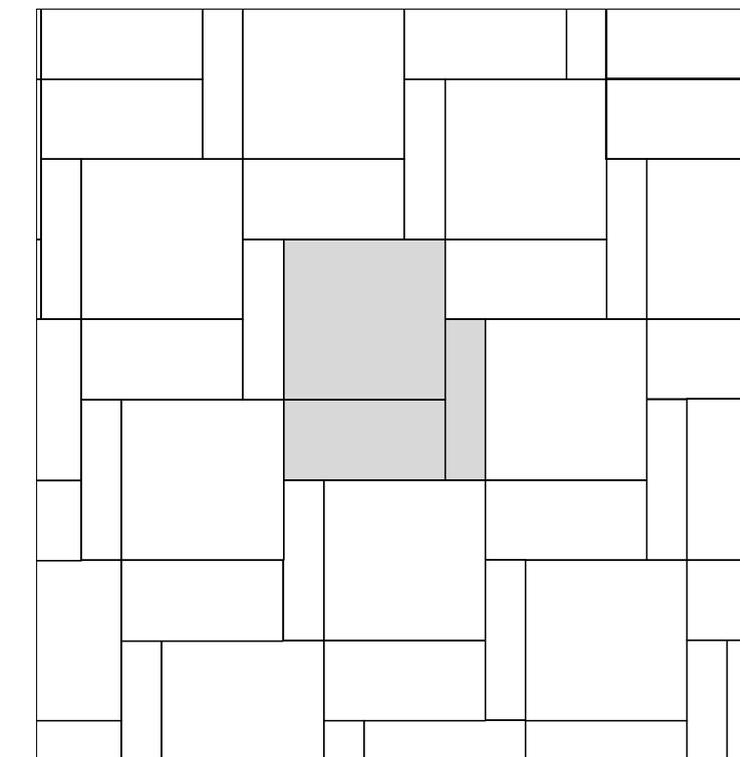


Module percentage

24"x24" = **38%**
 12"x24" = **19%**
 18"x36" = **43%**

Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").

LAYING 24"x24"- 12"x24" - 6"x24" ONE

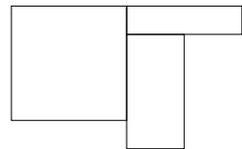
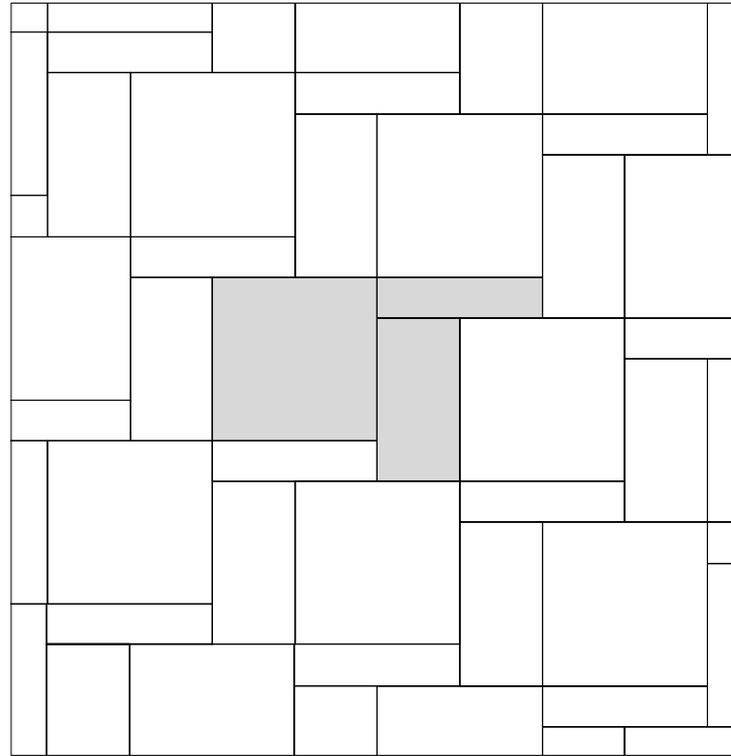


Module percentage

24"x24" = **57%**
 12"x24" = **29%**
 6"x24" = **14%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

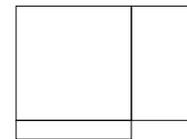
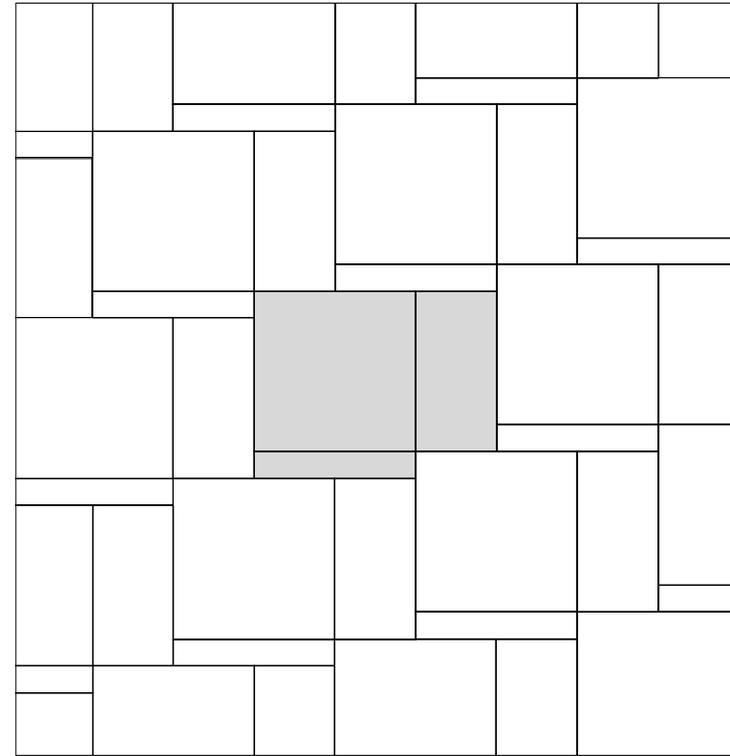
LAYING 24"x24"- 12"x24" - 6"x24" TWO



Module percentage

24"x24" = **57%**
 12"x24" = **29%**
 6"x24" = **14%**

LAYING 24"x24"- 12"x24" - 4"x24" ONE



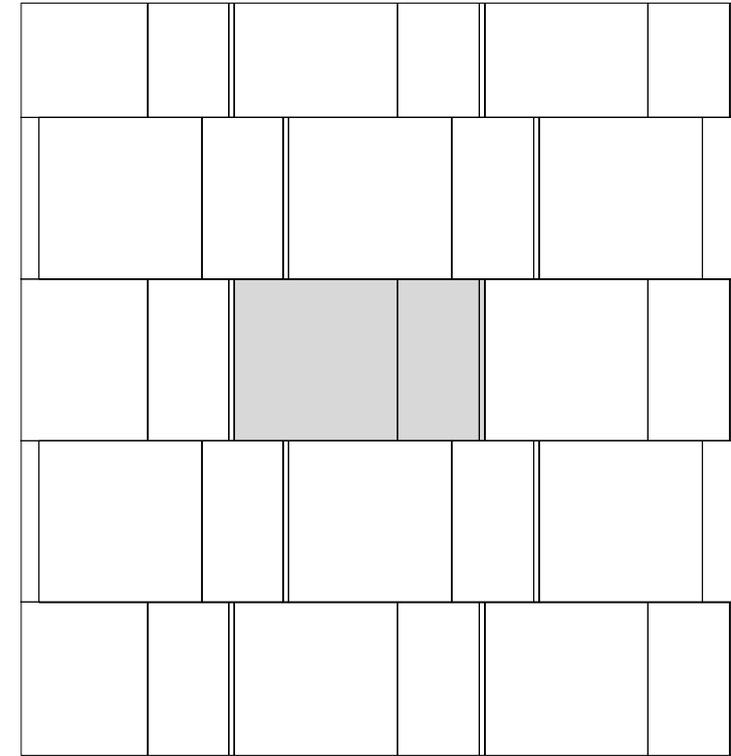
Module percentage

24"x24" = **60%**
 12"x24" = **30%**
 4"x24" = **10%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 24"x24"- 12"x24" - 0.8"x24" ONE

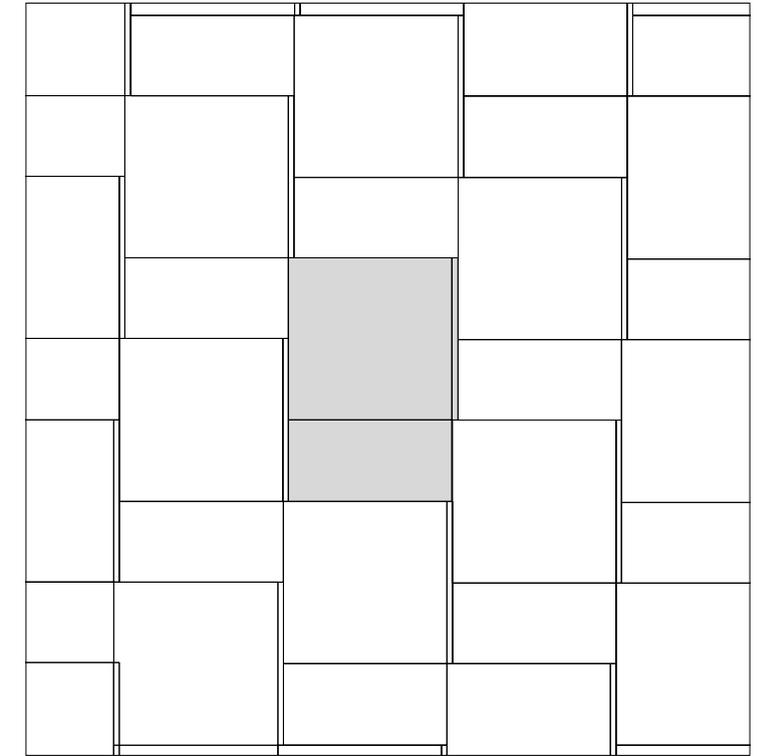


Module percentage

0.8"x24" = **2%**
 24"x24" = **65%**
 12"x24" = **33%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 24"x24"- 12"x24" - 0.8"x24" TWO

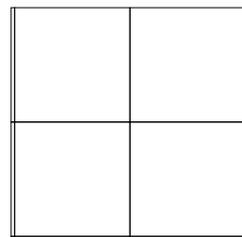
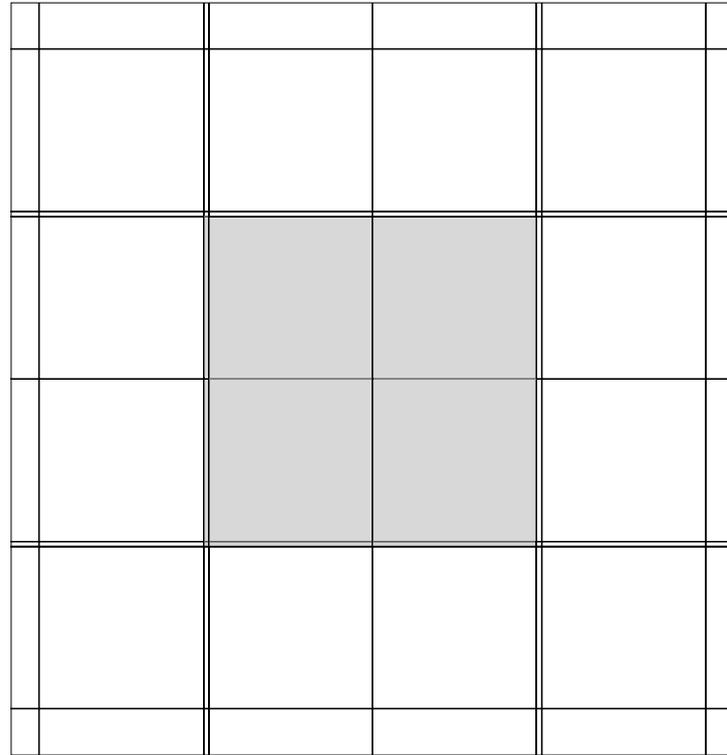


Module percentage

0.8"x24" = **2%**
 24"x24" = **65%**
 12"x24" = **33%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 2-3mm (approx 5/64" - 1/8").

LAYING 24"x24" - 0.8"x24" - 0.8"x0.8" ONE



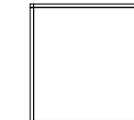
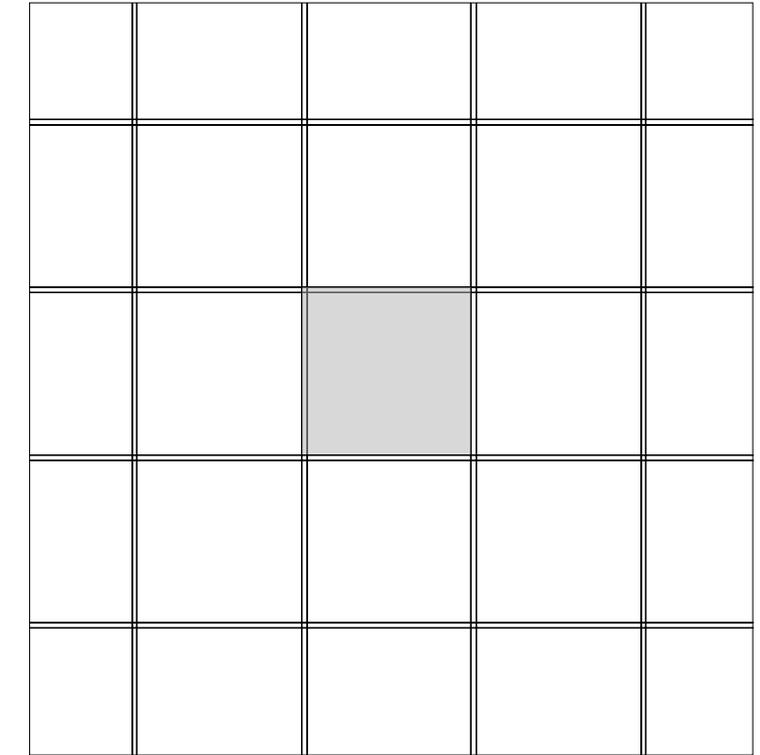
Module percentage

0.8"x0.8" = 0.1%
 0.8"x24" = 6.2%
 24"x24" = 93.7%

Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").



LAYING 24"x24" - 0.8"x24" - 0.8"x0.8" TWO

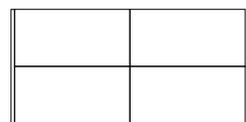
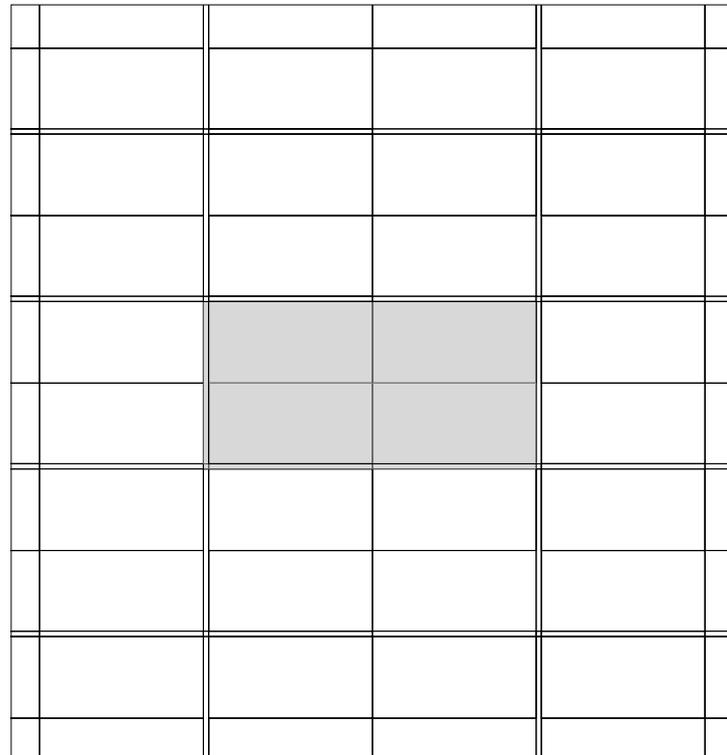


Module percentage

0.8"x0.8" = 0.1%
 0.8"x24" = 6.2%
 24"x24" = 93.7%

Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").

LAYING 12"x24" - 0.8"x24" - 0.8"x0.8" ONE



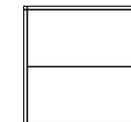
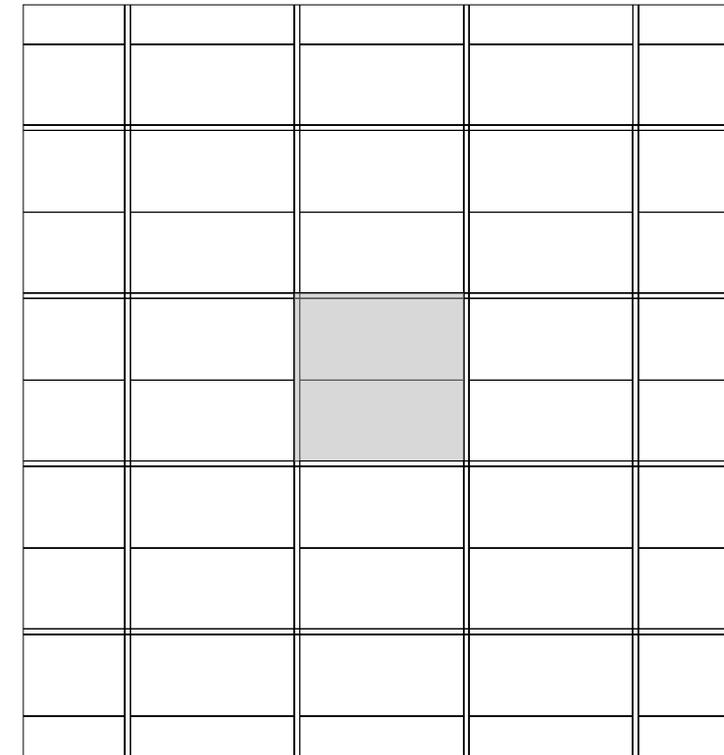
Module percentage

0.8"x0.8" = **0.3%**
 0.8"x24" = **6.2%**
 12"x24" = **93.5%**

Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").



LAYING 12"x24" - 0.8"x24" - 0.8"x0.8" TWO



Module percentage

0.8"x0.8" = **0.1%**
 0.8"x24" = **11.9%**
 12"x24" = **88%**

Note: installation possible with rectified material with joint of 2mm (approx 5/64"). Installation possible with not rectified material with joint of 2-3mm (approx 5/64" - 1/8").



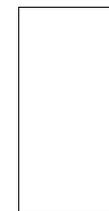
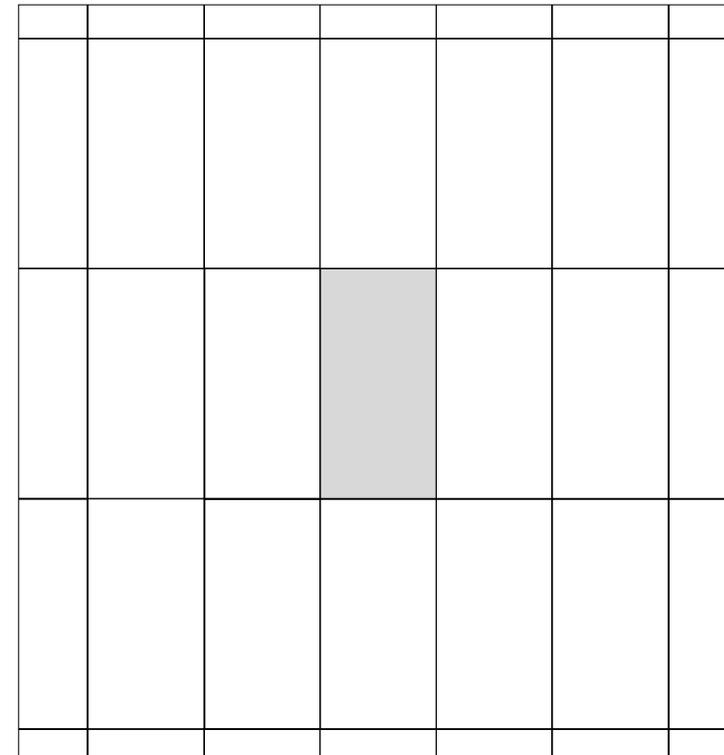
2

LAYING PATTERNS FOR
FRONTIER20 COLLECTION



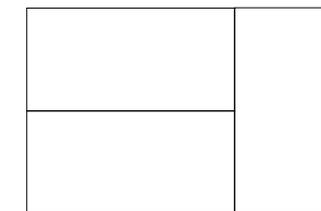
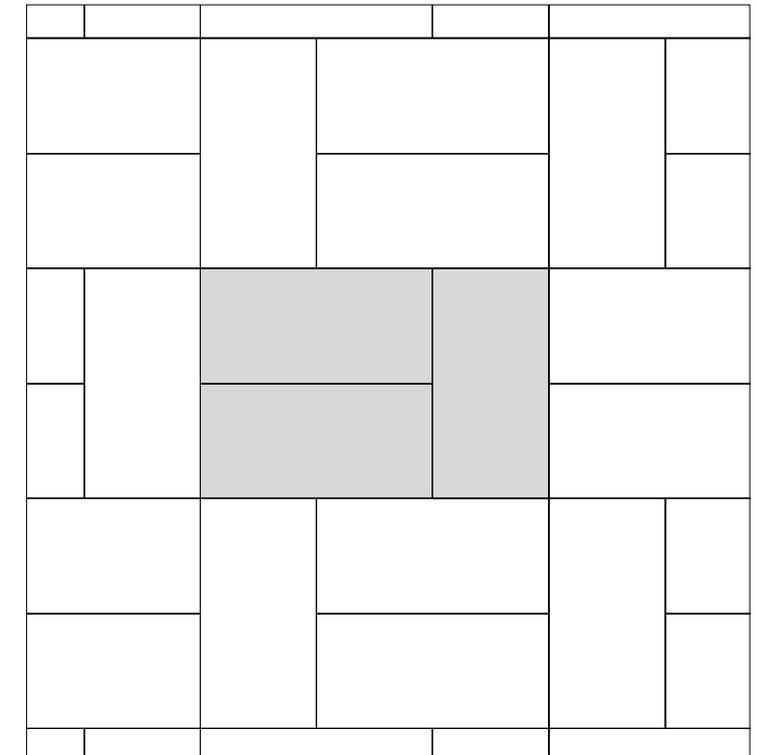
In this chapter you will find all the **single-size** laying patterns that can be created with 20mm Landmark Products.

LAYING 24"x48" ONE



Module percentage
24"x48" = 100%

LAYING 24"x48" TWO

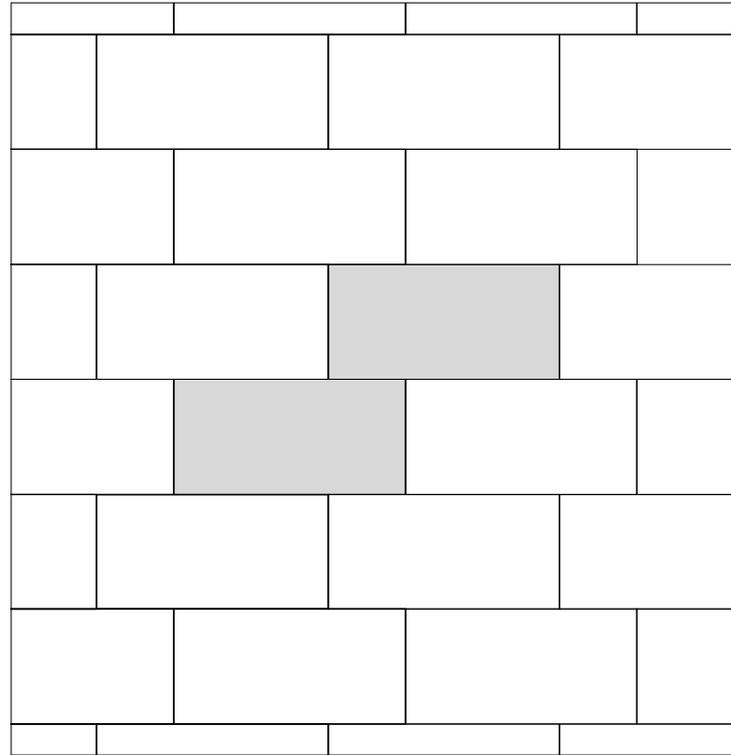


Module percentage
24"x48" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

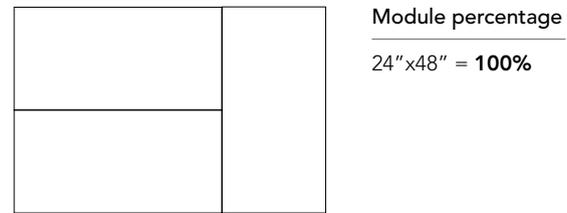
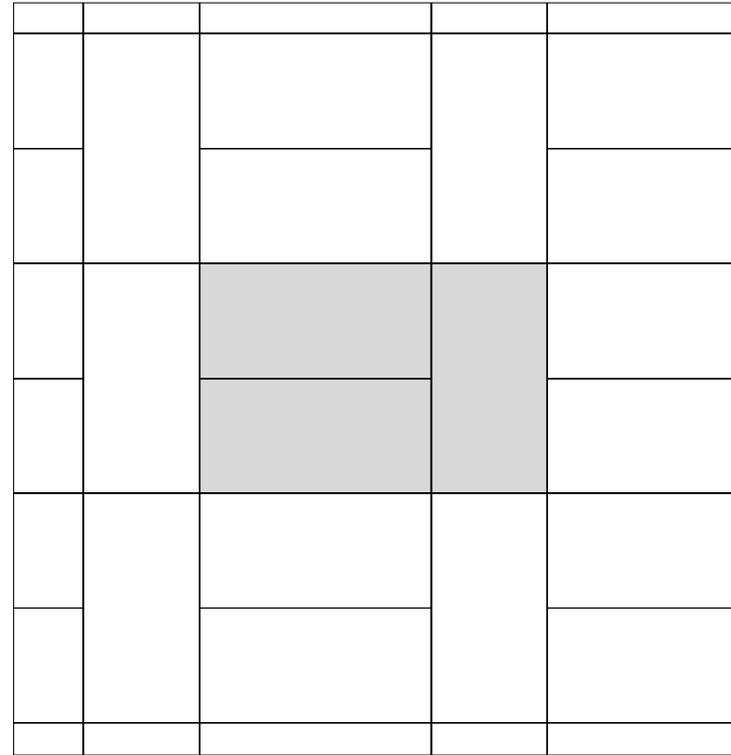
Note: installation possible with rectified material with joint of 4mm (approx 5/32"). Installation possible with not rectified material with joint of 4mm (approx 5/32").

LAYING 24"x48" THREE



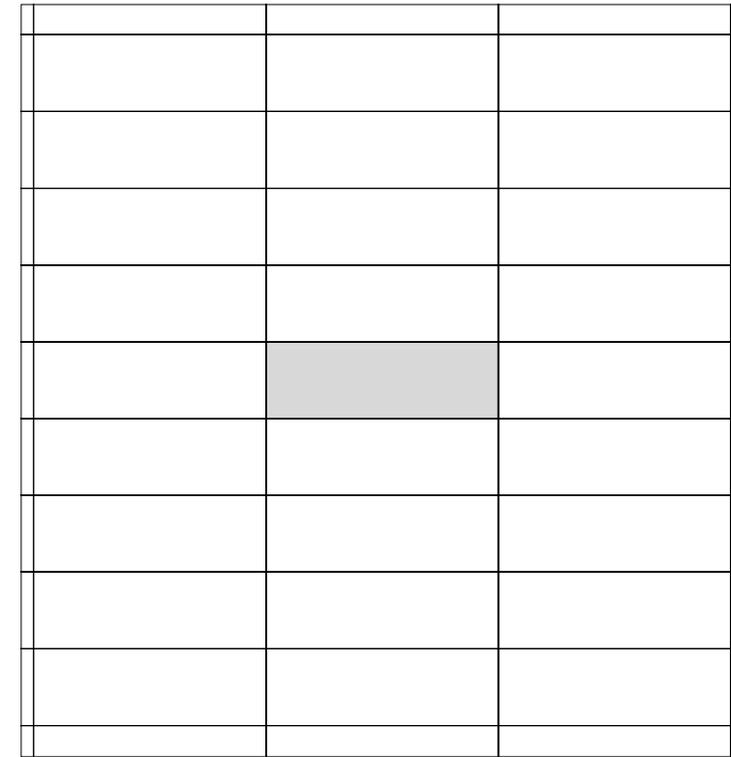
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

LAYING 24"x48" FOUR



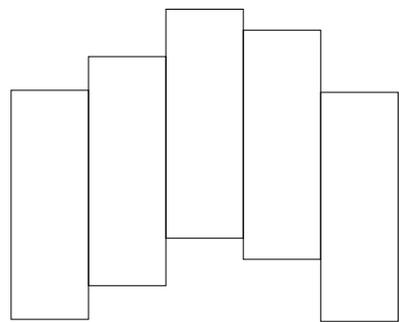
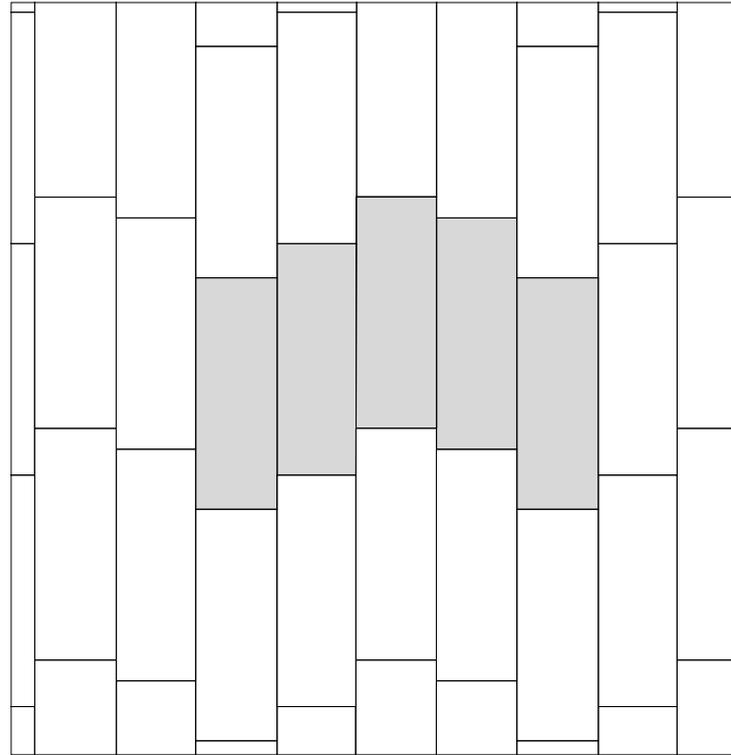
Note: installation possible with rectified material with joint of 4mm (approx 5/32"). Installation possible with not rectified material with joint of 4mm (approx 5/32").

LAYING 16"x48" ONE



Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

LAYING 16"x48" TWO

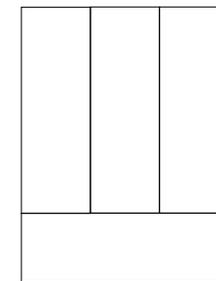
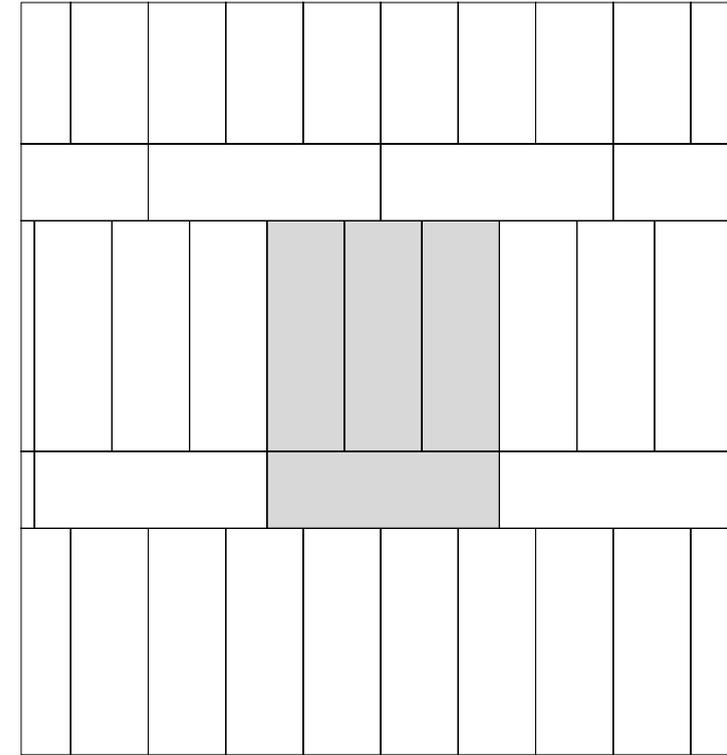


Module percentage
16"x48" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").



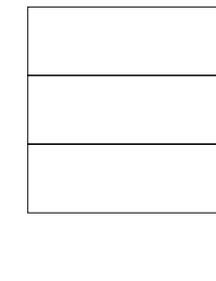
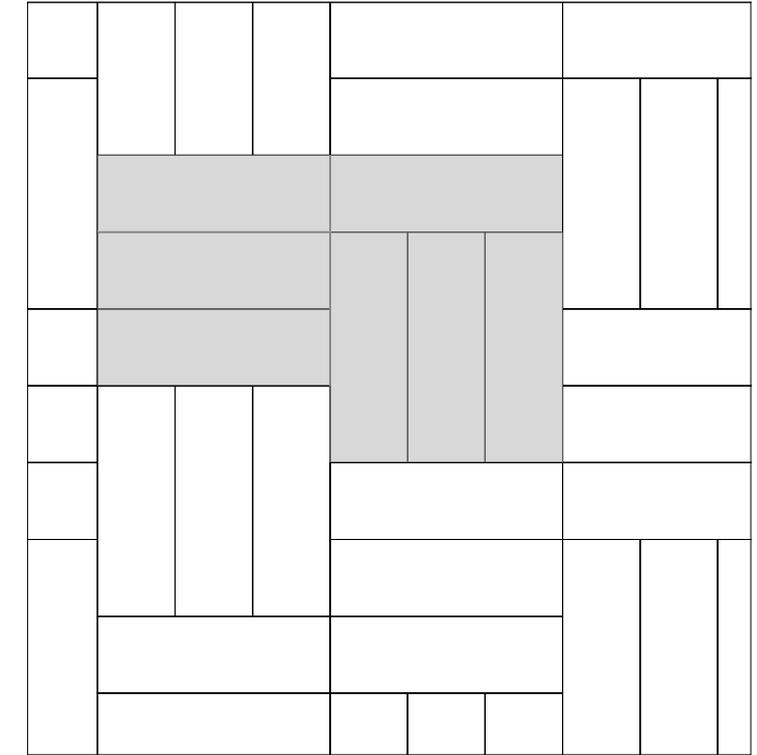
LAYING 16"x48" THREE



Module percentage
16"x48" = 100%

Note: installation possible with rectified material with joint of 4mm (approx 5/32"). Installation possible with not rectified material with joint of 4mm (approx 5/32").

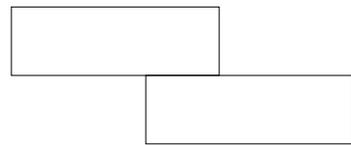
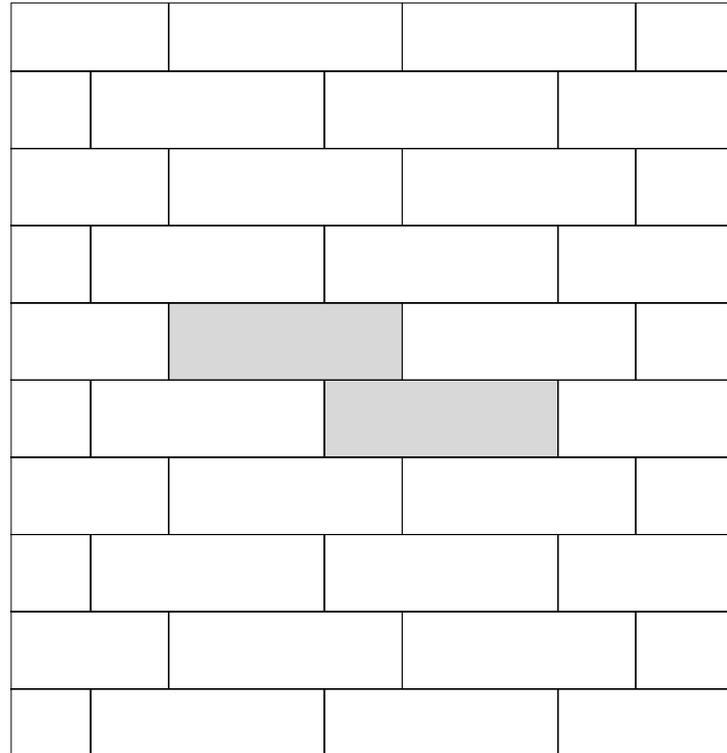
LAYING 16"x48" FOUR



Module percentage
16"x48" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

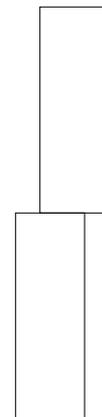
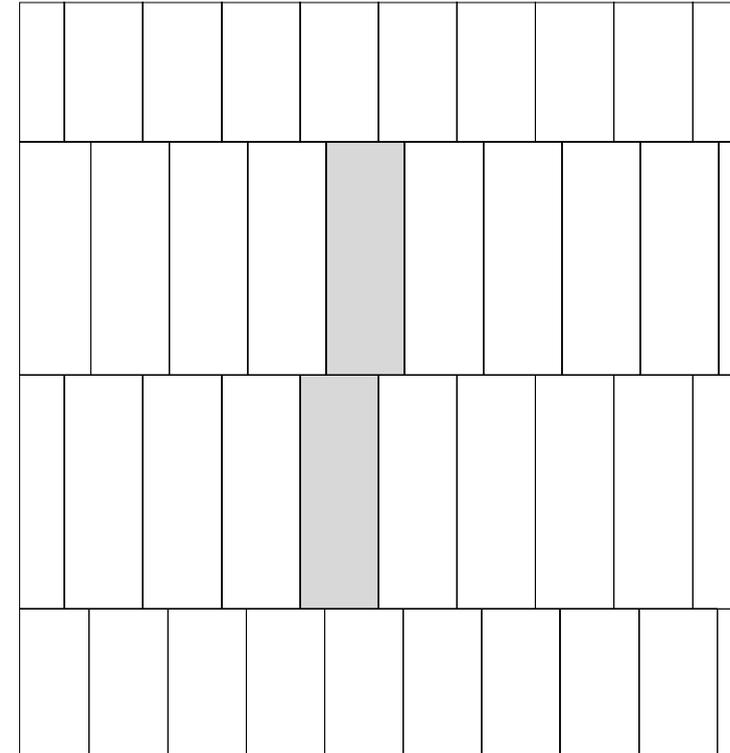
LAYING 16"x48" FIVE



Module percentage

16"x48" = 100%

LAYING 16"x48" SIX

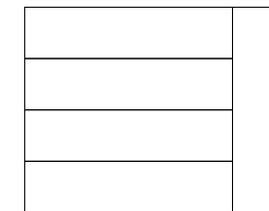
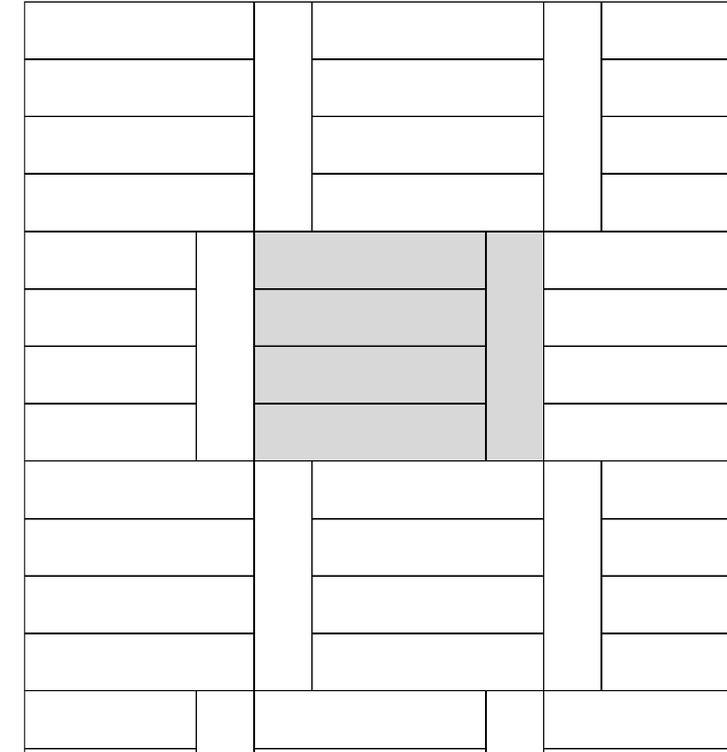


Module percentage

16"x48" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

LAYING 12"x48" ONE

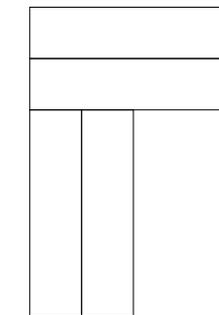
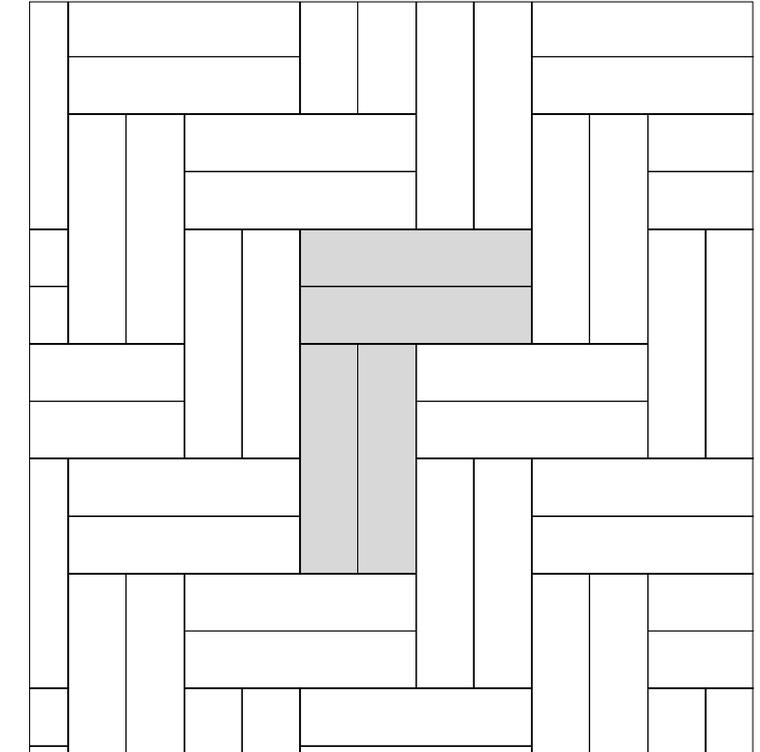


Module percentage

12"x48" = 100%

Note: installation possible with rectified material with joint of 4mm (approx 5/32"). Installation possible with not rectified material with joint of 4mm (approx 5/32").

LAYING 12"x48" TWO

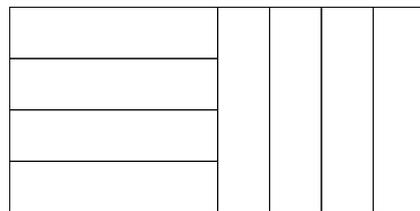
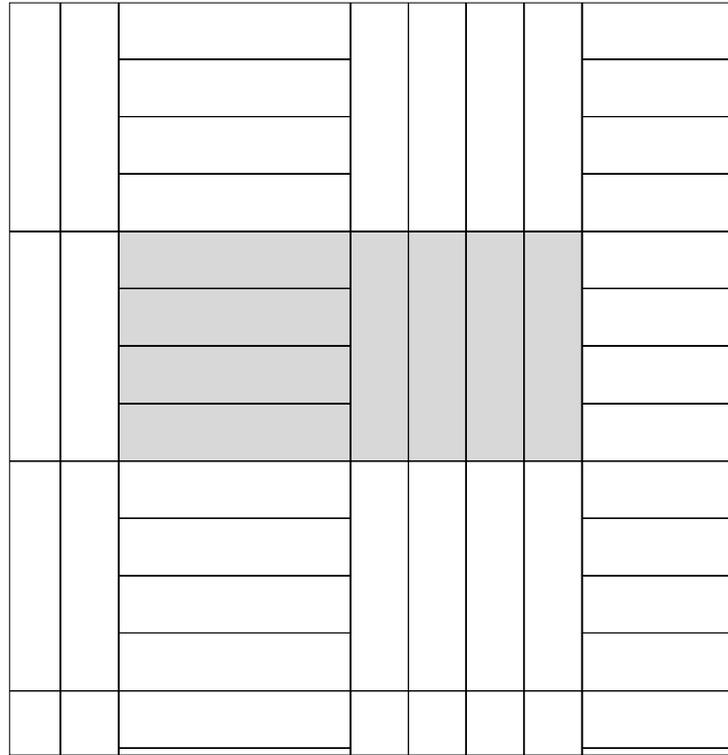


Module percentage

12"x48" = 100%

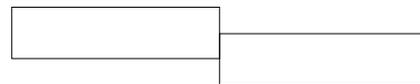
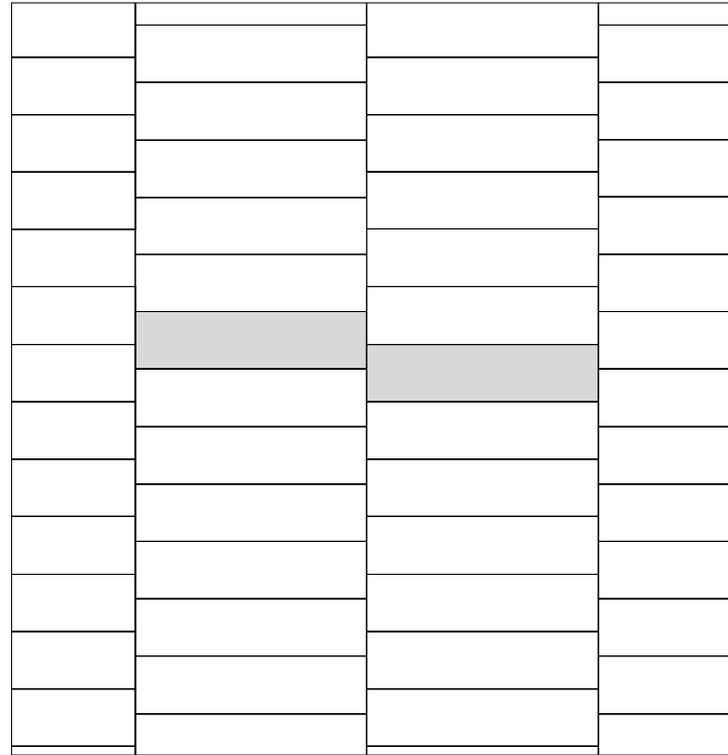
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

LAYING 12"x48" THREE



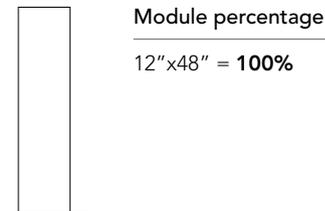
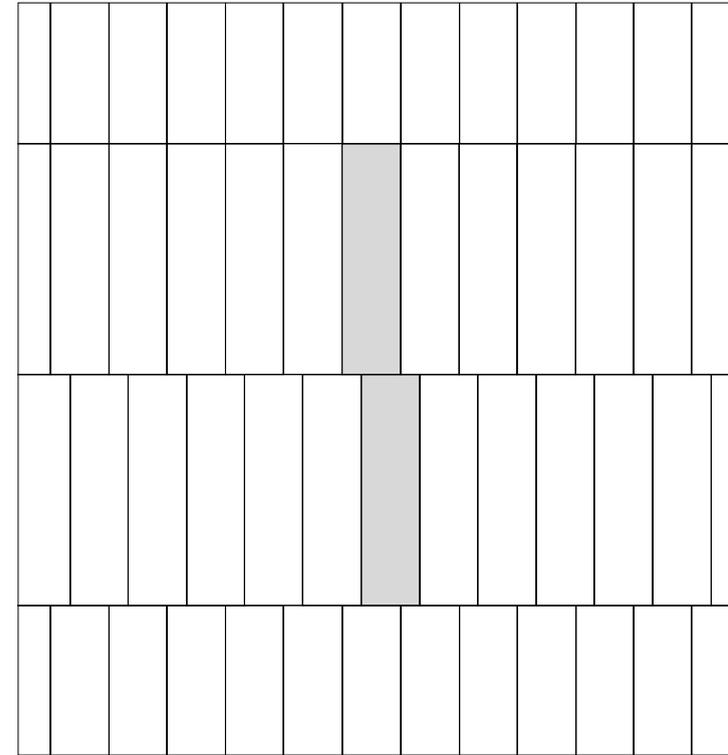
Module percentage
12"x48" = 100%

LAYING 12"x48" FOUR



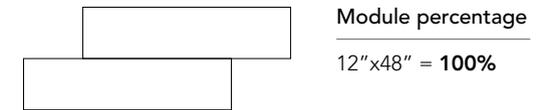
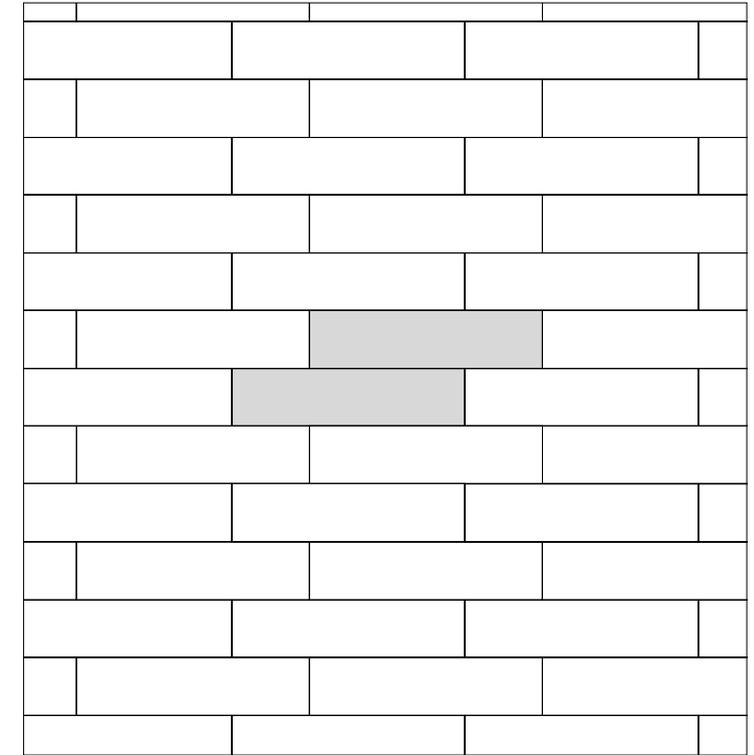
Module percentage
12"x48" = 100%

LAYING 12"x48" FIVE



Module percentage
12"x48" = 100%

LAYING 12"x48" SIX



Module percentage
12"x48" = 100%

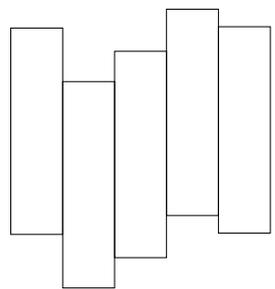
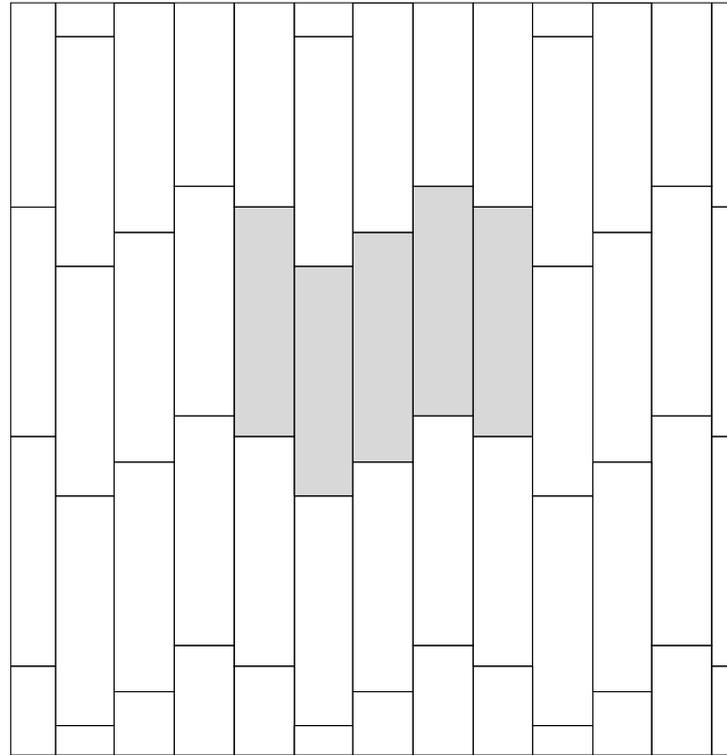
Note: installation possible with rectified material with joint of 4mm (approx 5/32"). Installation possible with not rectified material with joint of 4mm (approx 5/32")

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

LAYING 12"x48" SEVEN



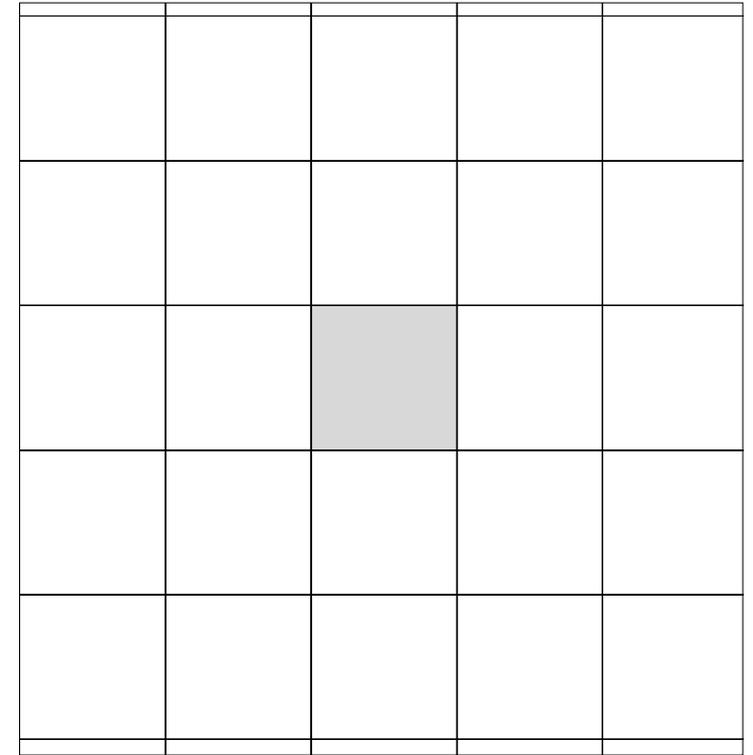
Module percentage

12"x48" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").



LAYING 24"x24" ONE



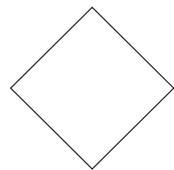
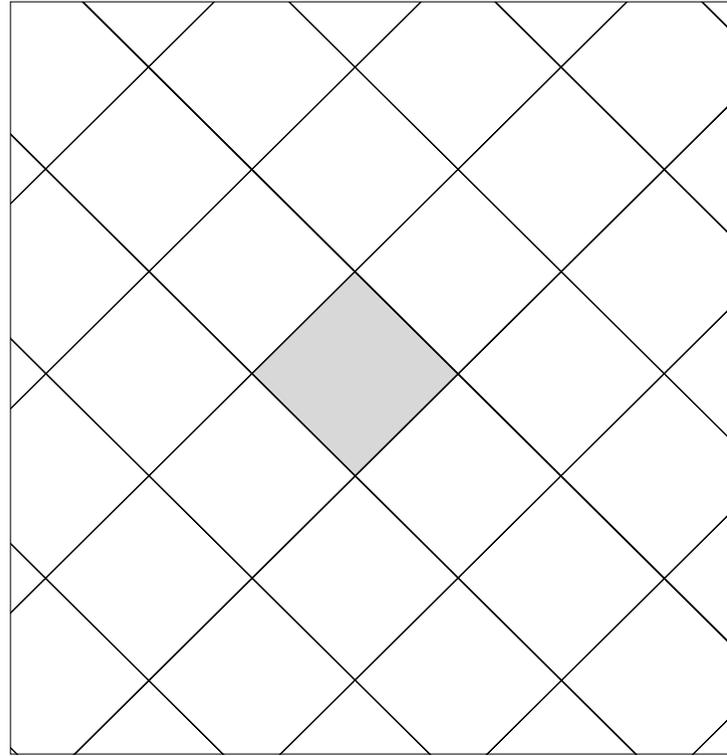
Module percentage

24"x24" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").



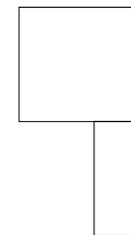
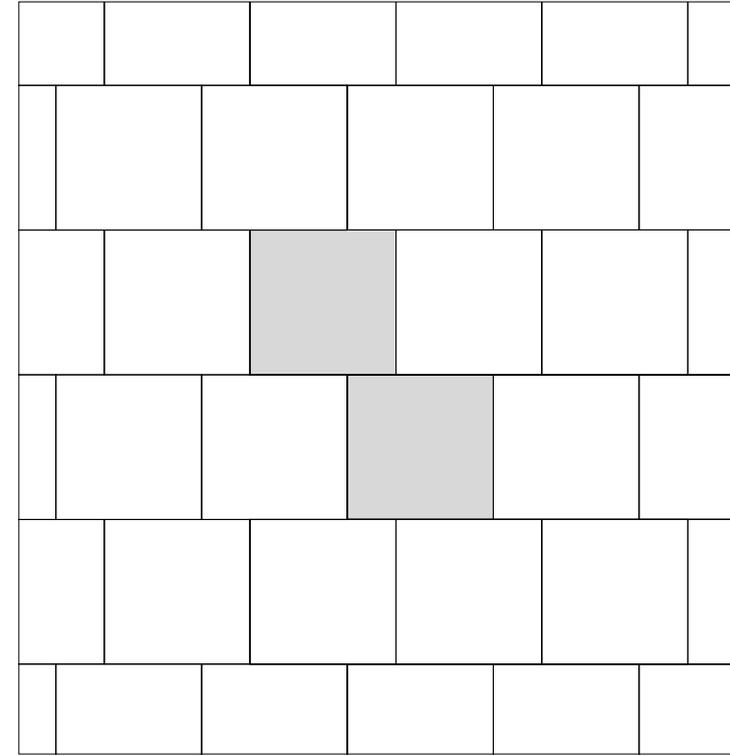
LAYING 24"x24" TWO



Module percentage

24"x24" = 100%

LAYING 24"x24" THREE



Module percentage

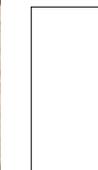
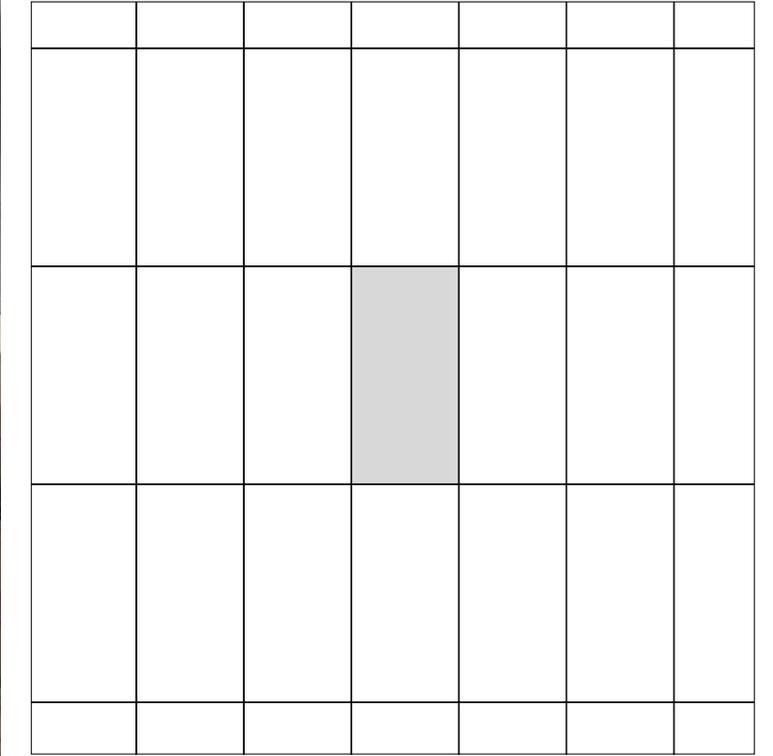
24"x24" = 100%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").



LAYING 18"x36" ONE

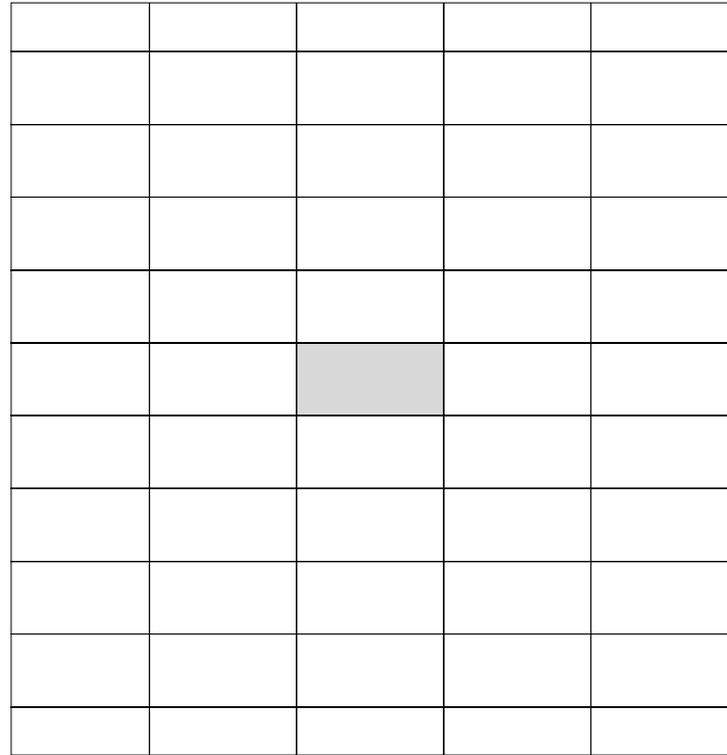


Module percentage

18"x36" = 100%

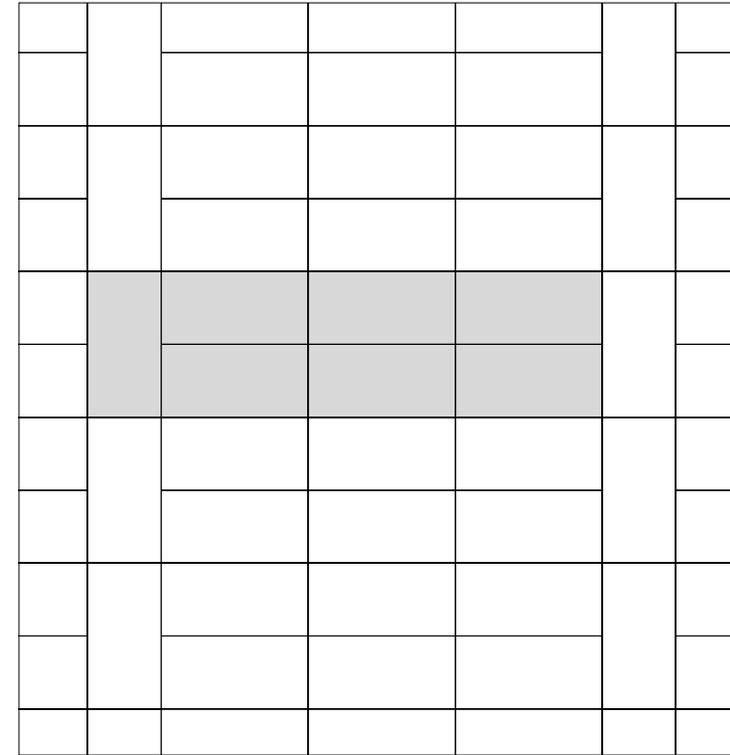
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

LAYING 12"x24" ONE



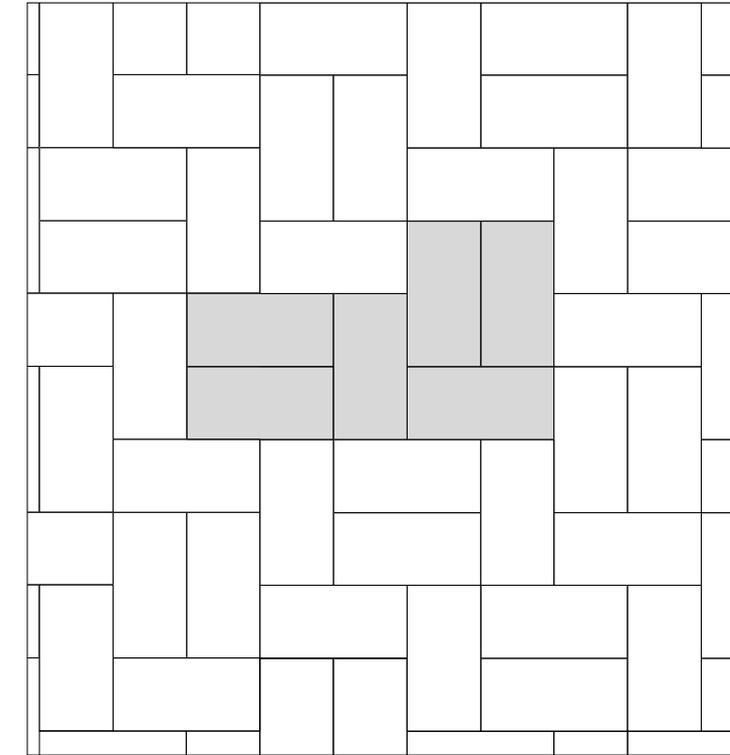
Module percentage
12"x24" = 100%

LAYING 12"x24" TWO



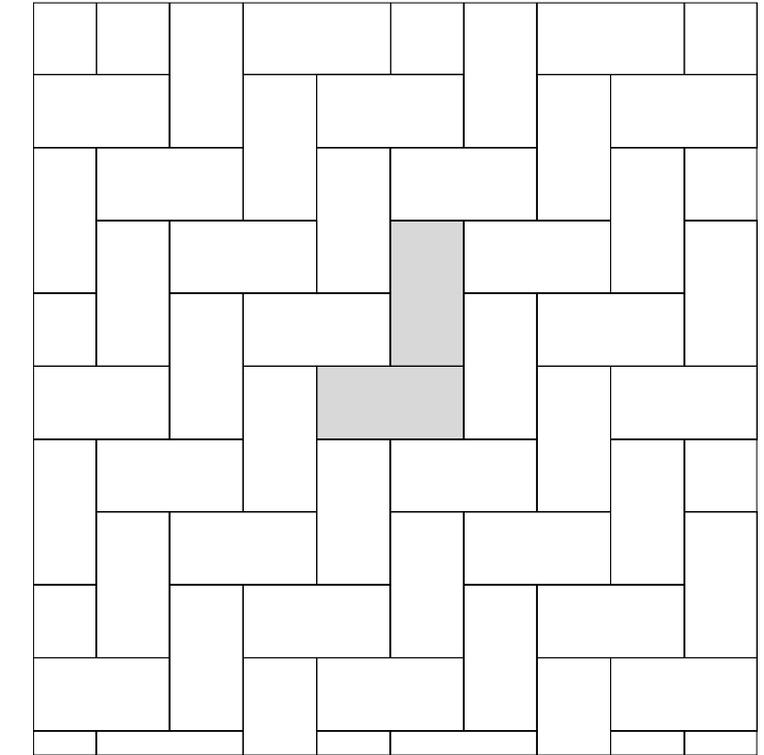
Module percentage
12"x24" = 100%

LAYING 12"x24" THREE



Module percentage
12"x24" = 100%

LAYING 12"x24" FOUR



Module percentage
12"x24" = 100%

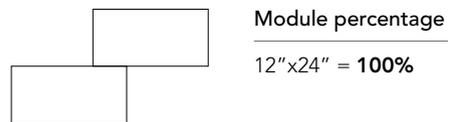
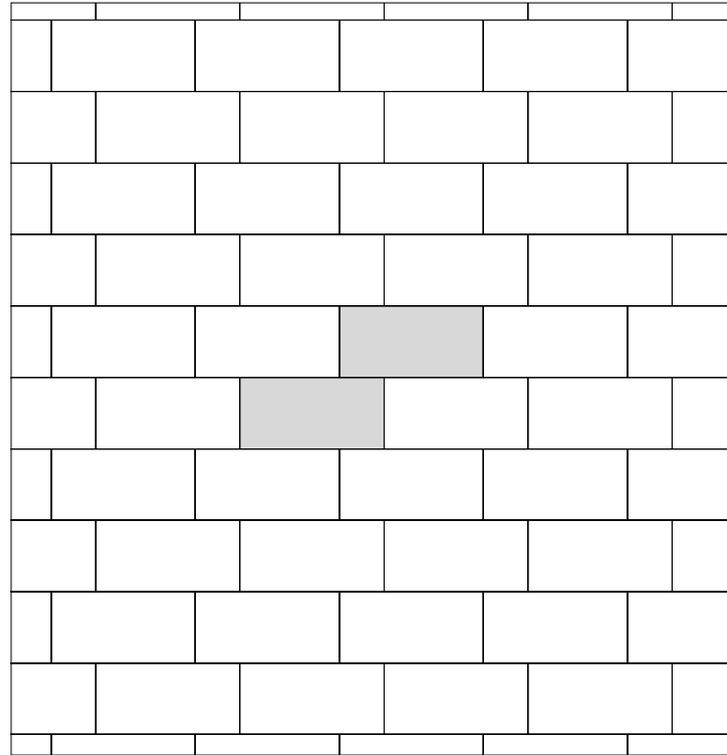
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with rectified material with joint of 4mm (approx 5/32"). Installation possible with not rectified material with joint of 4mm (approx 5/32").

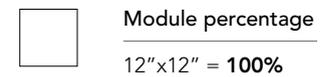
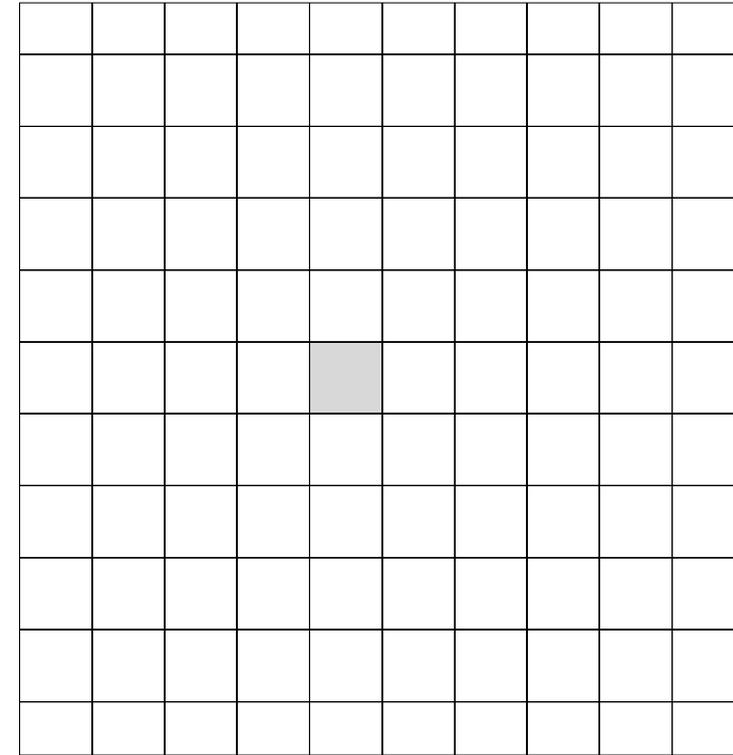
Note: installation possible with rectified material with joint of 4mm (approx 5/32"). Installation possible with not rectified material with joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

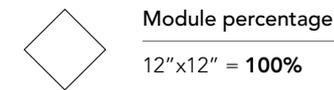
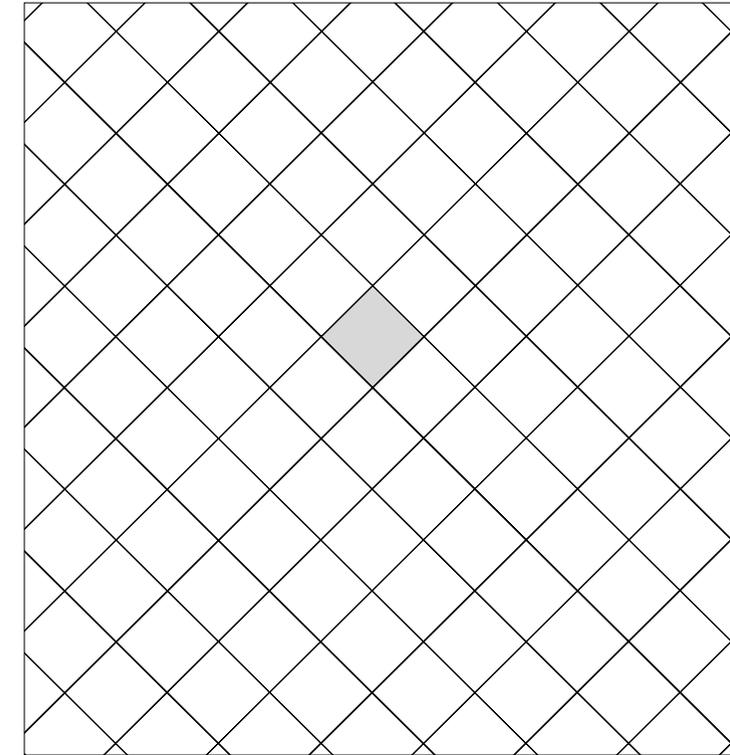
LAYING 12"x24" FIVE



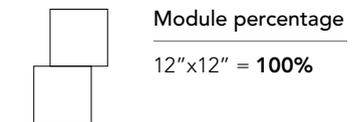
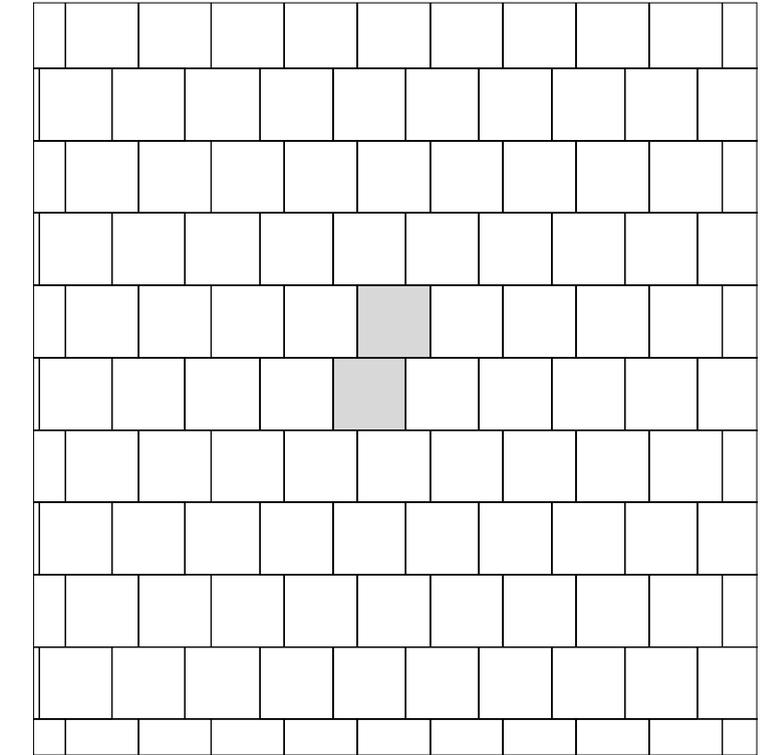
LAYING 12"x12" ONE



LAYING 12"x12" TWO



LAYING 12"x12" THREE



Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

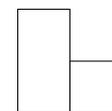
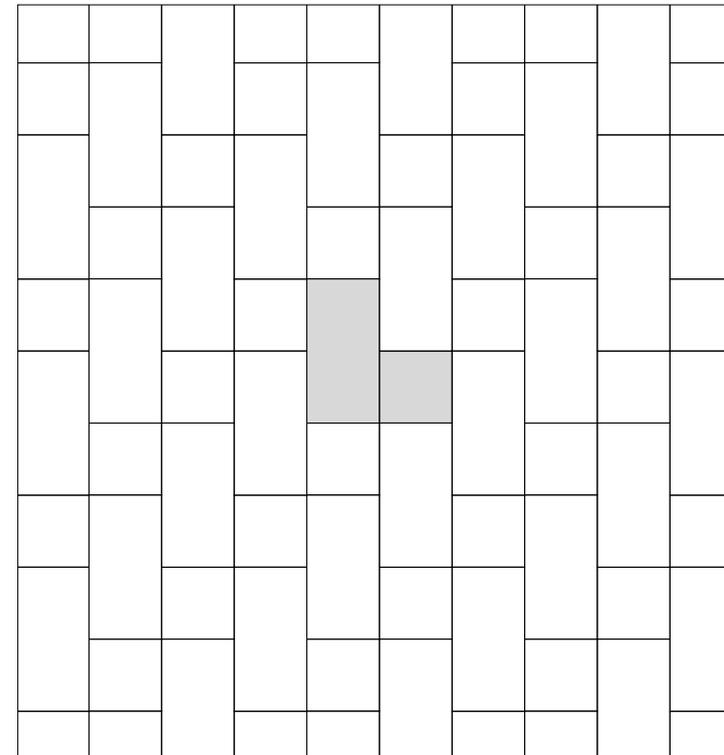
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").



In this chapter you will find all the laying patterns **M.P.D. SMALL** that can be created with Landmark products with a thickness of 20mm.

M.P.D. SMALL ONE

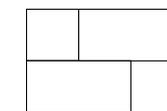
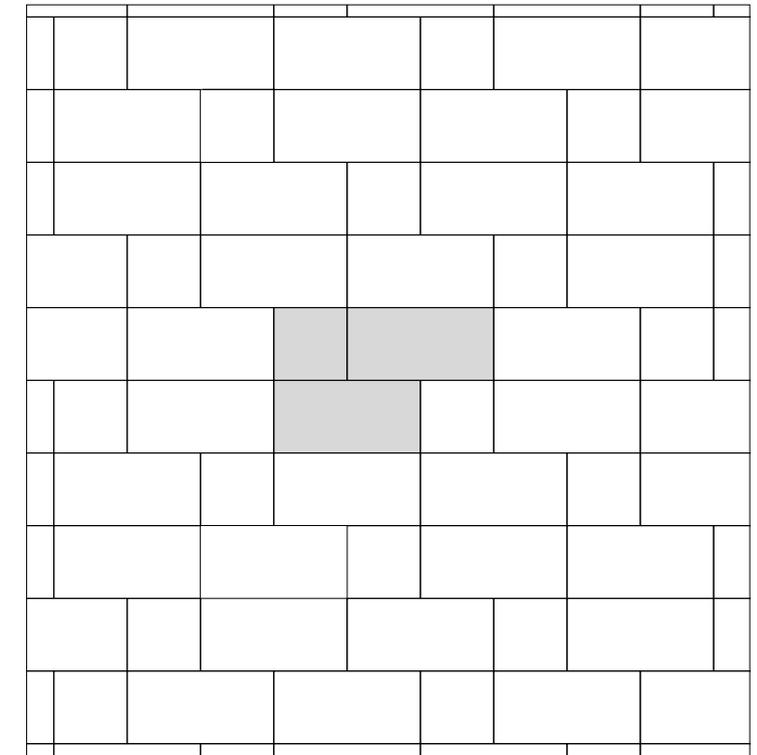


Module percentage

12"x24" = **67%**
12"x12" = **33%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

M.P.D. SMALL TWO

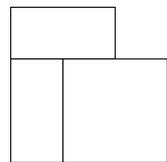
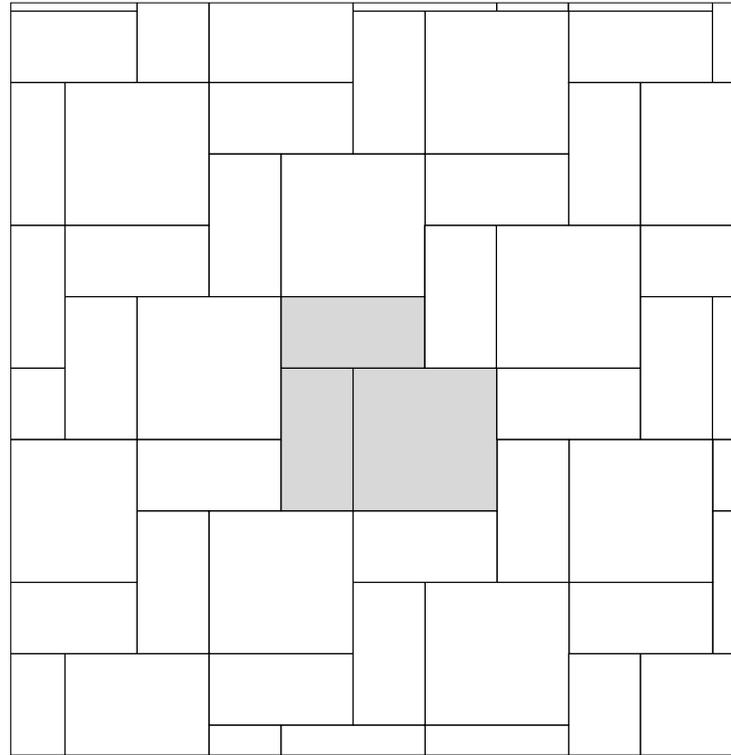


Module percentage

12"x24" = **80%**
12"x12" = **20%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

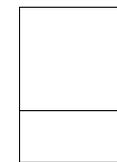
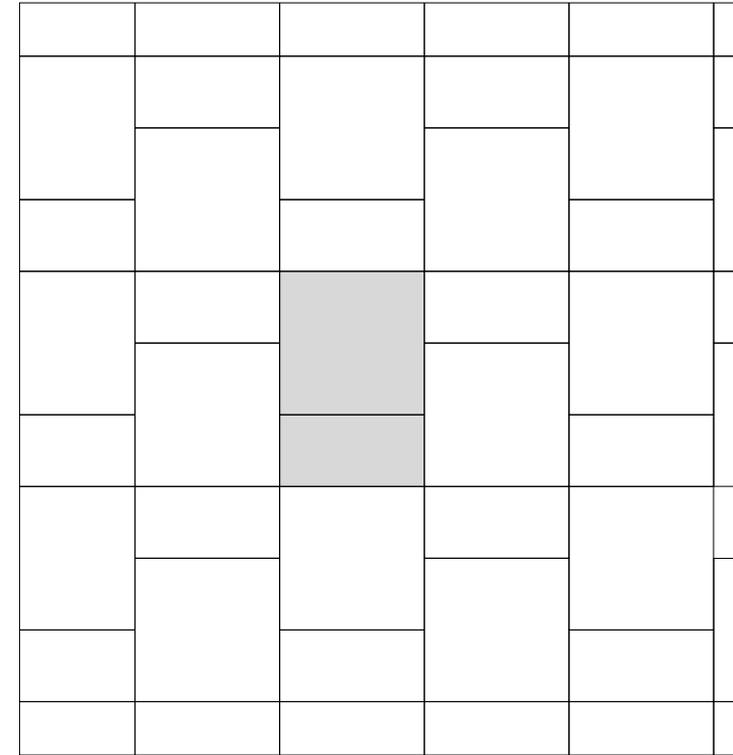
M.P.D. SMALL THREE



Module percentage

24"x24" = 50%
12"x24" = 50%

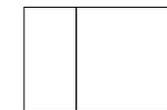
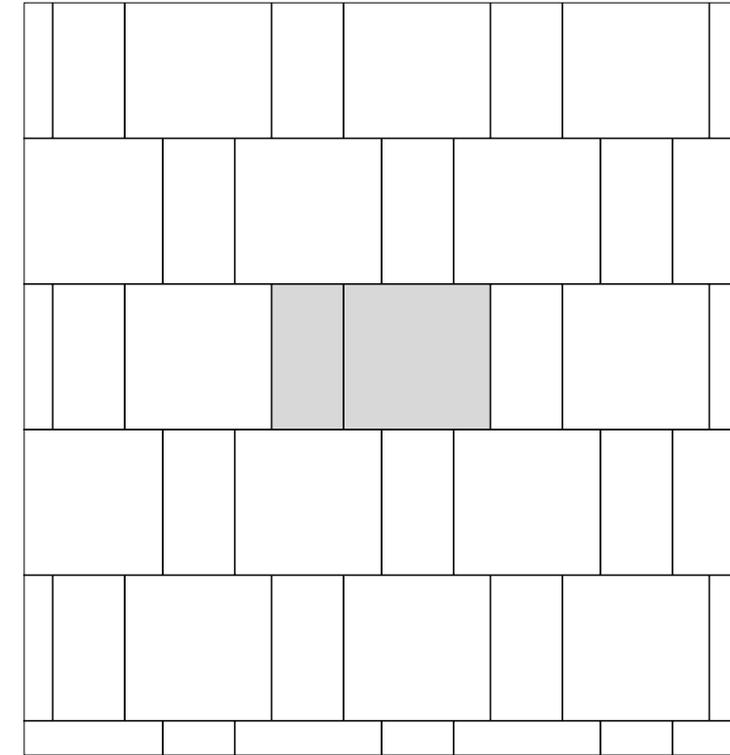
M.P.D. SMALL FOUR



Module percentage

24"x24" = 67%
12"x24" = 33%

M.P.D. SMALL FIVE



Module percentage

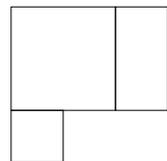
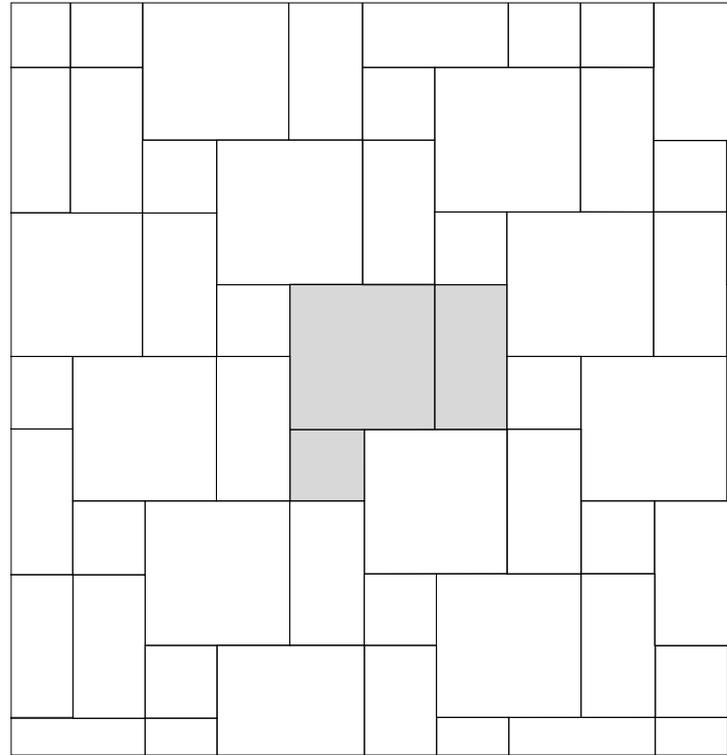
12"x24" = 33.5%
24"x24" = 66.5%

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

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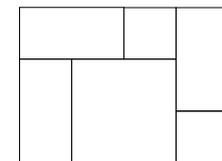
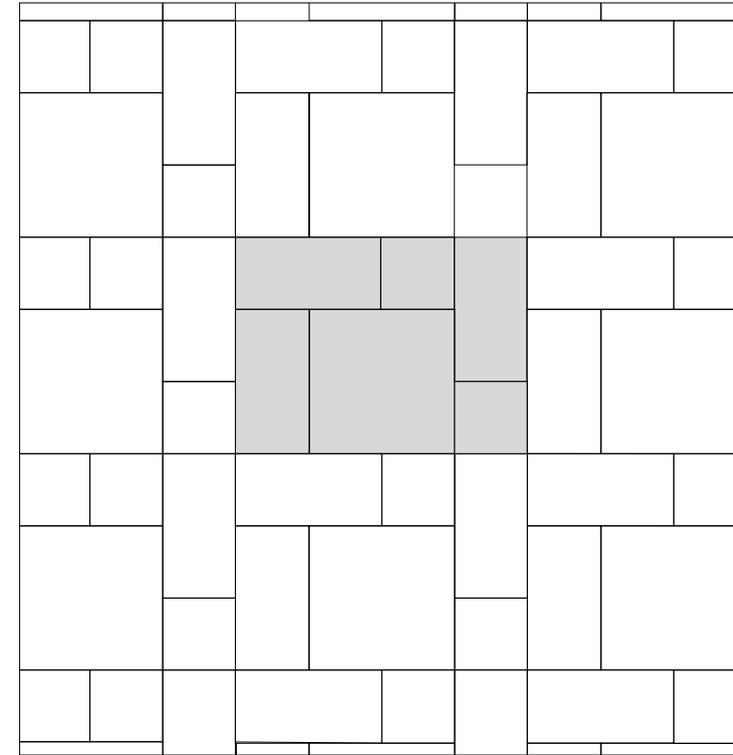
M.P.D. SMALL SIX



Module percentage

24"x24" = **57%**
 12"x24" = **29%**
 12"x12" = **14%**

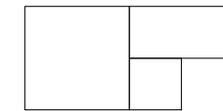
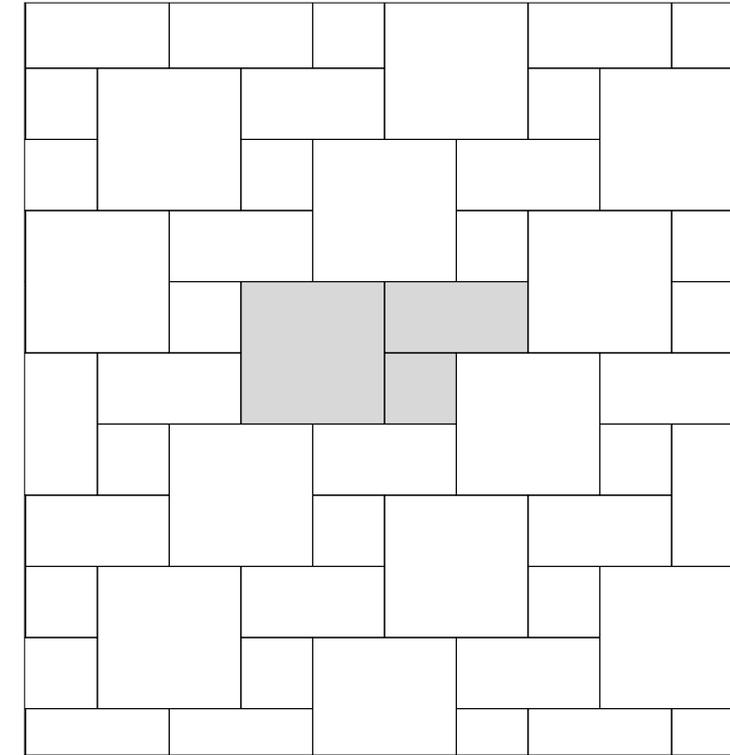
M.P.D. SMALL SEVEN



Module percentage

24"x24" = **33%**
 12"x24" = **50%**
 12"x12" = **17%**

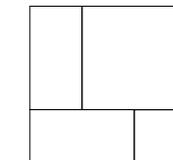
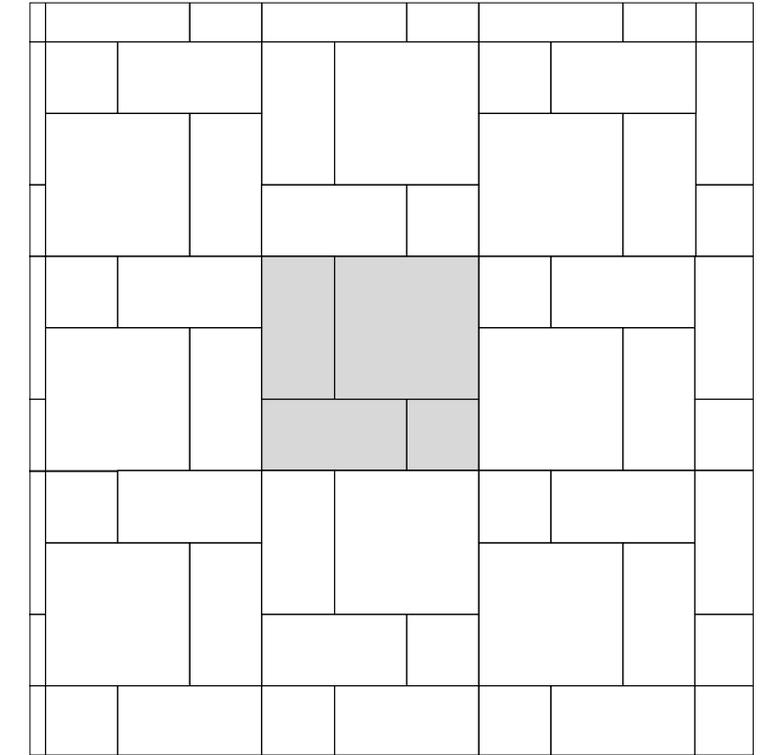
M.P.D. SMALL EIGHT



Module percentage

24"x24" = **57%**
 12"x24" = **29%**
 12"x12" = **14%**

M.P.D. SMALL NINE



Module percentage

24"x24" = **44%**
 12"x24" = **45%**
 12"x12" = **11%**

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").

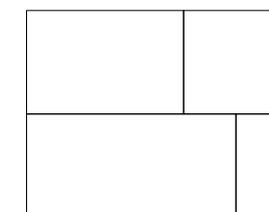
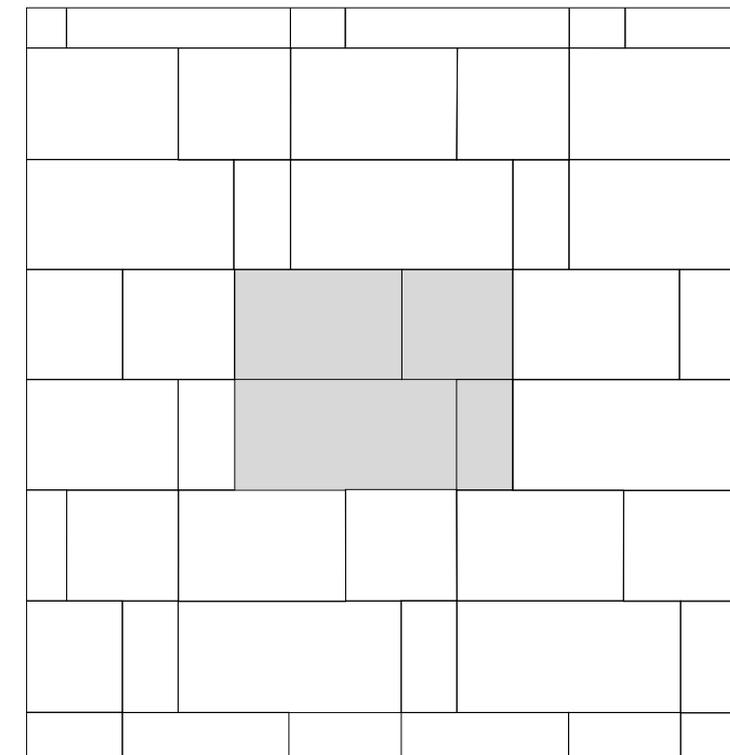
Note: installation possible with both rectified and not rectified material. We recommend a minimum joint of 4mm (approx 5/32").



In this chapter you will find all the laying patterns **M.P.D. BIG** that can be created with Landmark products with a thickness of 20 mm.



M.P.D. BIG ONE

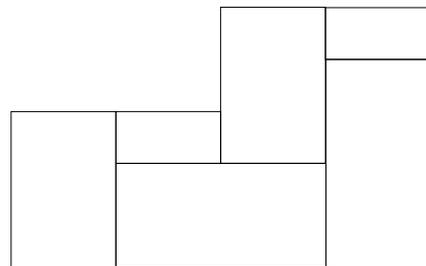
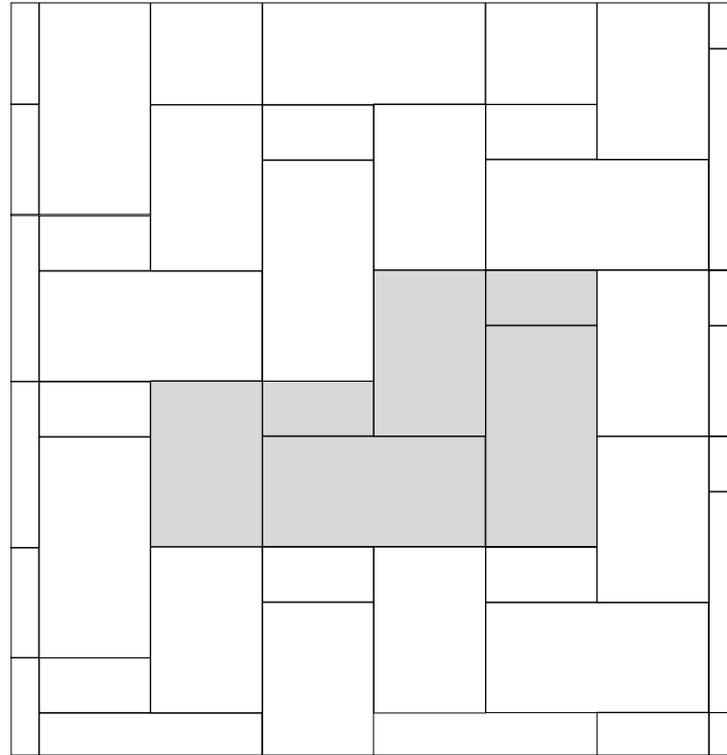


Module percentage
 24" x 48" = **40%**
 24" x 24" = **20%**
 24" x 36" + 12" x 24" (MIX) = **40% ****

Note: installation possible with rectified material. Modular with 4mm (approx 5/32").

The 24" x 36" and 12" x 24" sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. BIG TWO



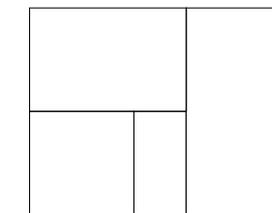
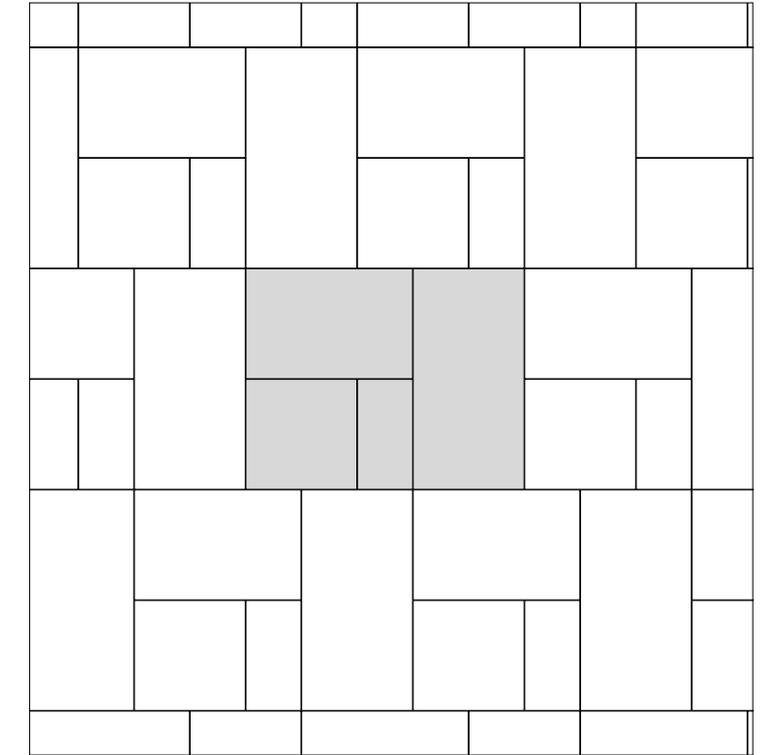
Module percentage
 24"x48" = **50%**
 24"x24" = **0%**
 24"x36" + 12"x24" (MIX) = **50%****

Note: installation possible with rectified material.
 Modular with 4mm (approx 5/32").

The 24"x36" and 12"x24" sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.



M.P.D. BIG THREE



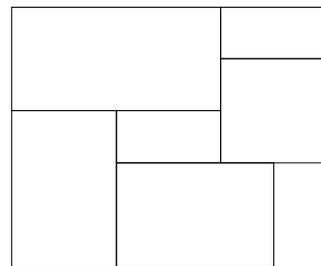
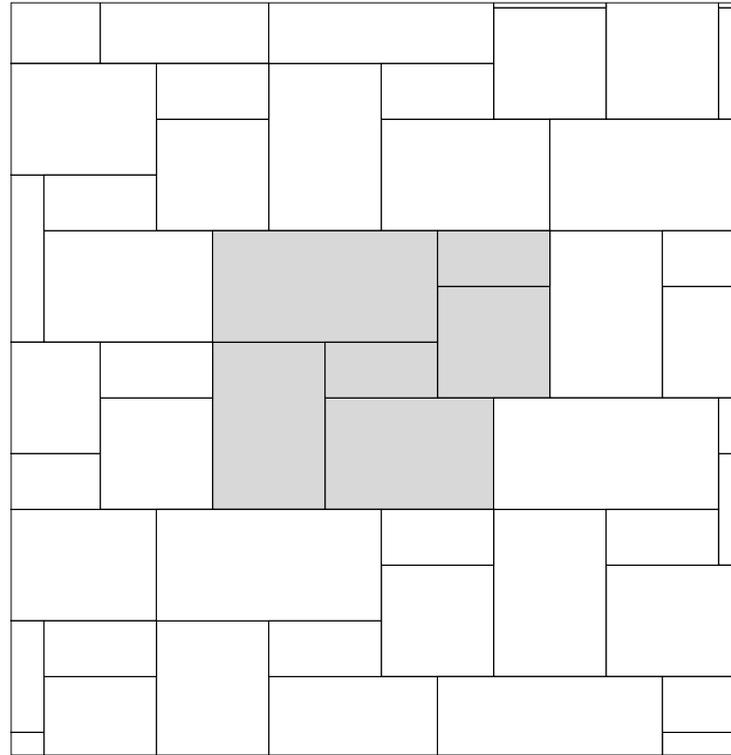
Module percentage
 24"x48" = **40%**
 24"x24" = **20%**
 24"x36" + 12"x24" (MIX) = **40%****

Note: installation possible with rectified material.
 Modular with 4mm (approx 5/32").

The 24"x36" and 12"x24" sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.



M.P.D. BIG FOUR



Module percentage

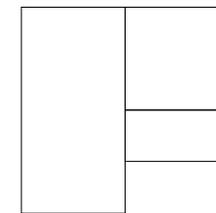
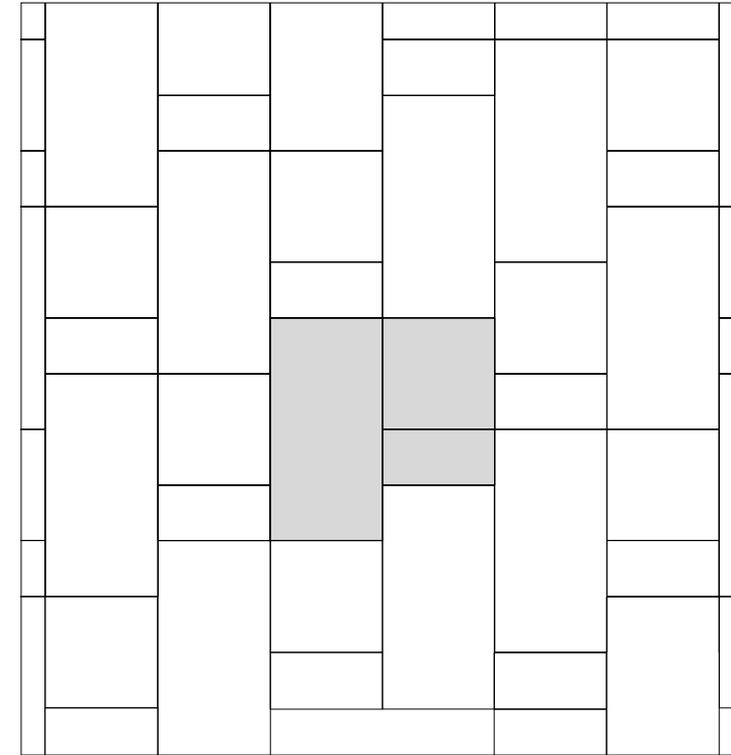
24" x 48" = **28.6%**
 24" x 24" = **14.3%**
 24" x 36" + 12" x 24" (MIX) = **57.1% ****

Note: installation possible with rectified material.
 Modular with 4mm (approx 5/32").

The 24" x 36" and 12" x 24" sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.



M.P.D. BIG FIVE



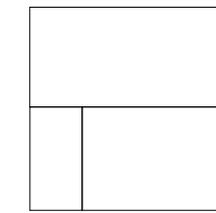
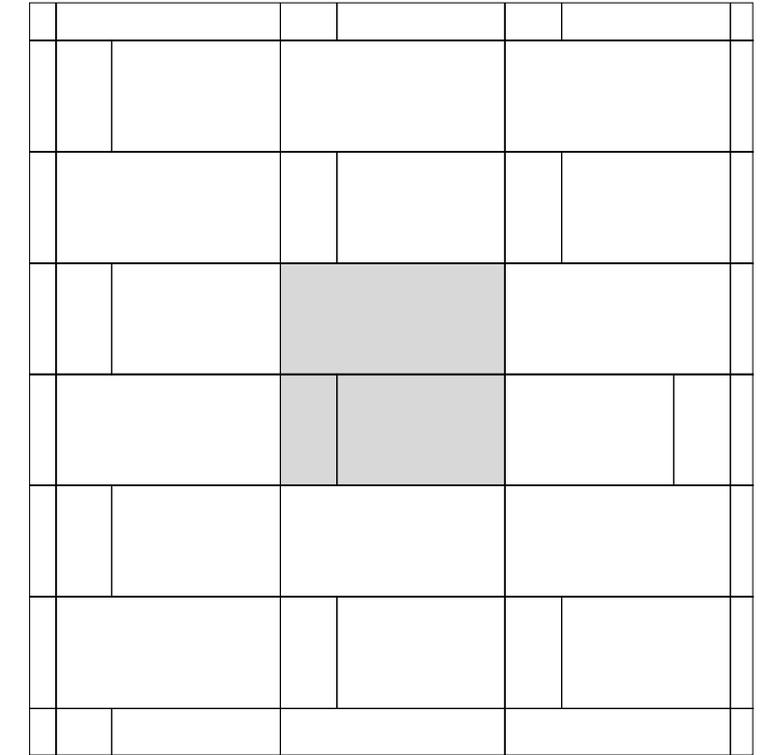
Module percentage

24" x 48" = **57%**
 24" x 24" = **29%**
 12" x 24" = **14%**

Note: installation possible with rectified material.
 Modular with 4mm (approx 5/32").

The 24" x 36" and 12" x 24" sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. BIG SIX



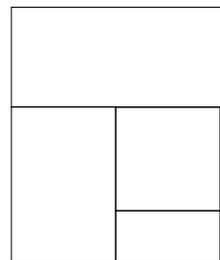
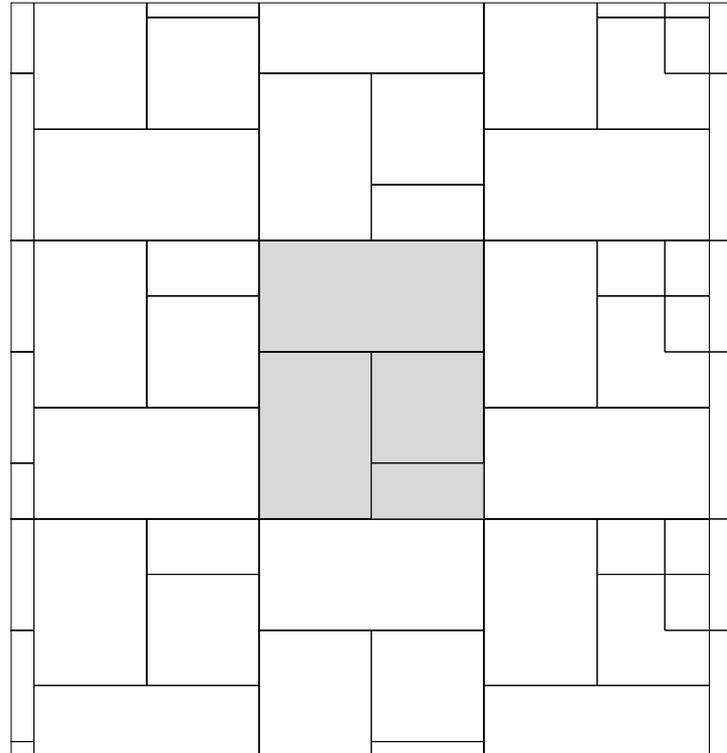
Module percentage

24" x 48" = **50%**
 24" x 36" = **37.5%**
 12" x 24" = **12.5%**

Note: installation possible with rectified material.
 Modular with 4mm (approx 5/32").

The 24" x 36" and 12" x 24" sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. BIG SEVEN

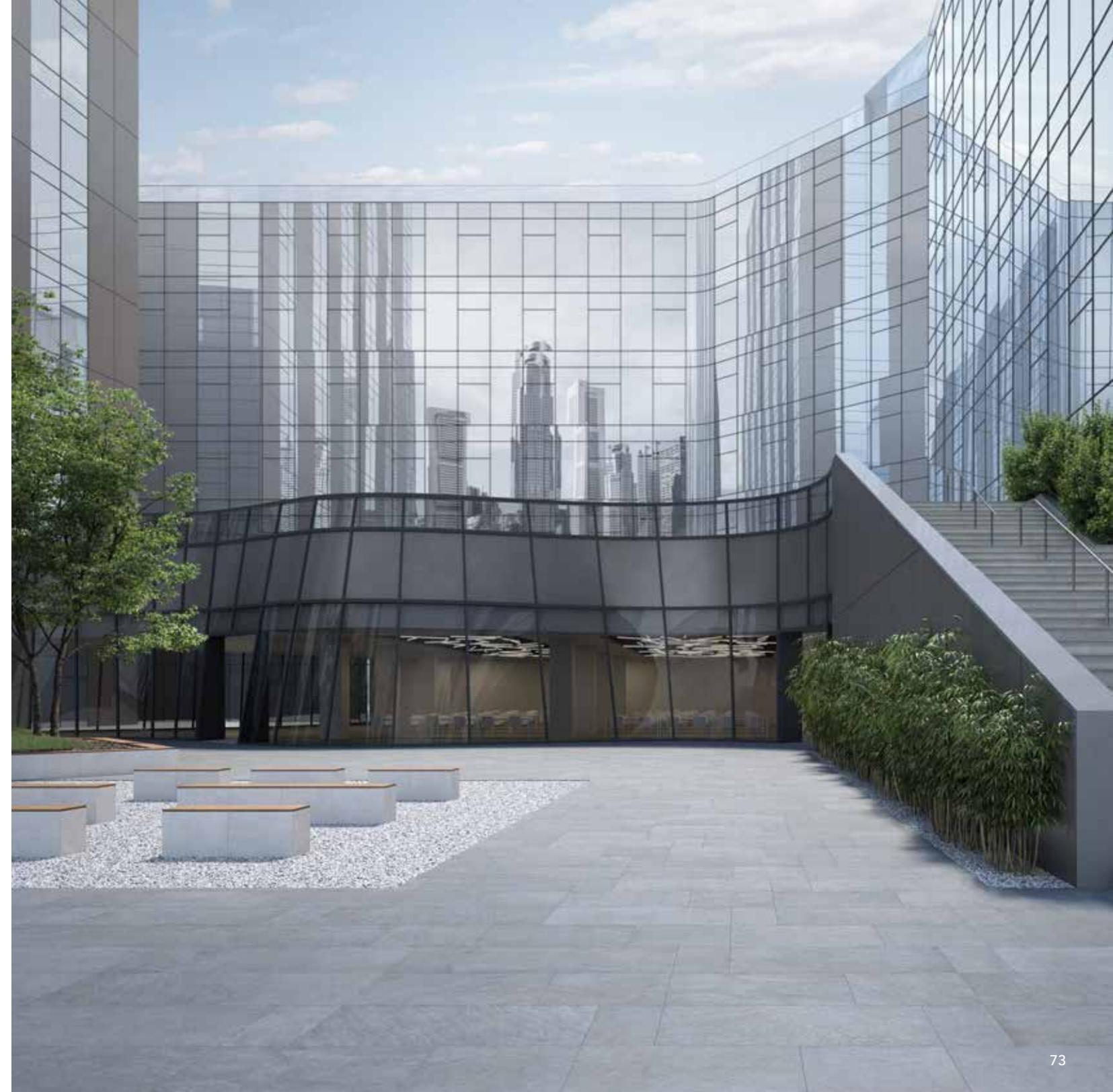


Module percentage

- 24" x 48" = 40%
- 24" x 36" = 30%
- 24" x 24" = 20%
- 12" x 24" = 10%

Note: installation possible with rectified material.
Modular with 4mm (approx 5/32").

The 24" x 36" and 12" x 24" sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.





3

TILE PERFORMANCE DATA

9 MM / 20 MM

LAYING AND CLEANING INFORMATION

LAYING SUGGESTIONS
FINAL FLOOR CLEANING

PORCELAIN TILE PERFORMANCE DATA - 9 mm

PHYSICAL PROPERTIES	TEST ASTM	NORTH AMERICAN STANDARD A137.1*	RESULTS
 Water absorption *	C373	≤ 0.5%	COMPLY WITH ANSI A137.1
 DCOF Average dynamic coefficient of friction **	BOT 3000 test	≥ 0.42	≥ 0.42 ***
 Resistance to freeze/thaw cycling *	C1026	As reported	RESISTANT
 Warpage (edge)	C485	Warpage ± 0.4% or ± 0.05 in	COMPLY WITH ANSI A137.1
 Warpage (diagonal)	C485	Warpage ± 0.4% or ± 0.07 in	COMPLY WITH ANSI A137.1
 Wedging	C502	± 0.25% or ± 0.03 in	COMPLY WITH ANSI A137.1
 Chemical resistance	C650	As reported	UNAFFECTED
 Breaking strength	C648	250 lbf or greater	COMPLY WITH ANSI A137.1
 Thickness	C499	Range: 0.04 in	COMPLY WITH ANSI A137.1

- * Average values referred to our production and related to the matt finish of the product.
- ** As far as values relating to the matt finish of the product and to tests carried out by certified external laboratories whose results are available upon request at Headoffice, we are willing to check the lot you are interested in purchasing.
- *** Charme Lux and Magnifica Honed doesn't meet the 0.42 value. test results are available upon request.
- Be sure to use tiles belonging to the same caliber.
- Test results are available upon request. Those results are based on tests performed in the Landmark laboratory, or by other accredited third parties laboratories over the past months and represent by no means performance guarantee.
- Landmark tiles can be slippery when wet. We recommend to make sure that the surface is always dry.
- The information provided can be subject to change. Please refer to [lcusa.com](https://www.lcusa.com) for the latest, most accurate and up-to-date information.

PORCELAIN TILE PERFORMANCE DATA - 20 mm

PHYSICAL PROPERTIES	TEST ASTM	NORTH AMERICAN STANDARD A137.1*	RESULTS
 Water absorption *	C373	≤ 0.5%	COMPLY WITH ANSI A137.1
 DCOF Average dynamic coefficient of friction **	BOT 3000 test	≥ 0.42	≥ 0.42
 Skid Resistance	DIN 51097	-	A+B+C
	DIN 51130		R11
 Resistance to freeze/thaw cycling *	C1026	As reported	RESISTANT
 Warpage (edge)	C485	Warpage ± 0.4% or ± 0.05 in	COMPLY WITH ANSI A137.1
 Warpage (diagonal)	C485	Warpage ± 0.4% or ± 0.07 in	COMPLY WITH ANSI A137.1
 Wedging	C502	± 0.25% or ± 0.03 in	COMPLY WITH ANSI A137.1
 Chemical resistance	C650	As reported	UNAFFECTED
 Breaking strength	C648	250 lbf or greater	2200 lbf
 Thickness	C499	Range: 0.04 in	COMPLY WITH ANSI A137.1

- * Average values referred to our production and related to the matt finish of the product.
- ** As far as values relating to the matt finish of the product and to tests carried out by certified external laboratories whose results are available upon request at Headoffice, we are willing to check the lot you are interested in purchasing.
- Be sure to use pavers belonging to the same caliber.
- Test results are available upon request.
- The information provided can be subject to change. Please refer to <https://hardscape.landmarkceramics.com> for the latest, most accurate and up-to-date information.

Information

WARNING

Please contact Landmark Ceramics to verify compatibility between the chosen product and the laying pattern.

RECOMMENDED USE FOR 9 MM THICK - MATT FINISH PRODUCTS (ALL COLLECTIONS)

These products are recommended for indoor floors, walls, countertops, and outdoor walls in commercial and residential application. The use of these products is not recommended for horizontal exterior surfaces that require anti-slip features. Landmark recommends an offset no greater than 30%. If a staggered pattern is required for tiles of 20" inches or longer. Visit lcusa.com for detailed instructions of installation.

RECOMMENDED USE FOR 9 MM THICK - HONED AND LUX FINISH PRODUCTS (ALL COLLECTIONS)

These products are recommended for indoor floors, walls, countertops, and outdoor walls in commercial and residential application. The use of these products is not recommended for horizontal exterior surfaces that require anti-slip features. We do recommend not using the honed and Lux finish for wet areas where deposits of water are likely to occur. Landmark recommends an offset no greater than 30%. If a staggered pattern is required for tiles of 20" inches or longer. Visit lcusa.com for detailed instructions of installation.

RECOMMENDED USE FOR 20 MM THICK PRODUCTS (ALL COLLECTIONS)

These products are recommended for indoor floors, walls, countertops, and outdoor floor and walls in commercial and residential application. Landmark recommends an offset no greater than 30%. If a staggered pattern is required for tiles of 20" inches or longer. Visit lcusa.com for detailed instructions of installation.

CARE AND MAINTENANCE

Do not apply any wax or sealer to the product after installation. Before grouting ensure that you apply a grout release when using honed or lux finish. Regular cleaning is the best way to keep Magnifica, Charme, Charme Lux tiles looking good. Use clean, hot water (add household cleaner for more aggressive cleaning). Rinse thoroughly and dry with a soft cloth to prevent water spots. Please visit lcusa.com. For further information regarding the care and maintenance of Landmark products.

The use of the Lux finish is limited to wall cladding and floor application in residential venues and in spaces subject to low footfall, avoiding the direct contact with outdoor areas which require anti-slip features.

WARRANTY

Landmark guarantees that its products will meet or exceed the performance specifications set out in ANSI A137.1- 2012 and in the performance specifications section of this catalog. For more information, please visit our website at lcusa.com.



Laying suggestions

Foundation layer, joints

When large areas must be tiled, it is necessary to pay great attention when designing the foundation structures which must take the following elements into account.

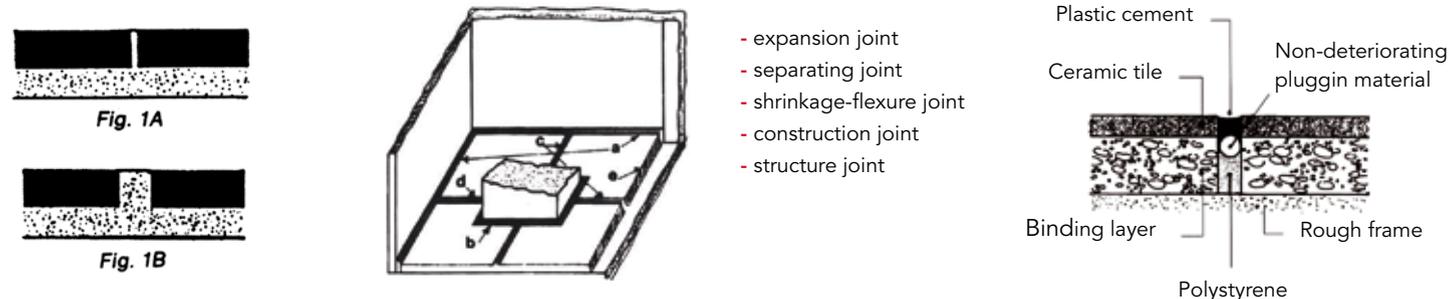
- EXPANSION DUE TO HEAT
- DEFORMATION AND SPLITTING DUE TO SHRINKAGE
- STRUCTURAL SETTLING

The presence of an insulating layer (like vermiculite or opencell clay) in the foundation could lead to possible settling due to lesser resistance of this material to compression. This inconvenience can be avoided by adding electrowelded netting to the foundation. The mortar forming the laying surface, which should be at least 5 cm thick, should have the following composition: WASHED SAND (Ø MAX 0,3 mm) 1 m3/CEMENT 325:200 Kg., WATER 80-100 l iters. When spreading the mechanically mixed material, it is advisable to limit the laying area in order to always ensure a wet surface. It is advisable to break up large areas into sectors measuring 4x4 or 5x5 m.

Insert polystyrene or polyurethane foam strips whenever continuing with the casting. These strips should be about 1 cm wide and should be as thick as the foundation layer (construction joints). These joints should also be made along perimeter walls and near columns and stairways (desolation joints). It is very important to match the bed joints with those of the flooring. Two methods exist for laying tiles: they can be laid side by side, in a continuous fashion, which is called "CLOSED JOINT" (Fig. 1 A), or leaving consistent spaces between tiles. This is called "OPEN JOINT" (Fig. 1 B); the recommended gap is 2-3 mm. An advantage of the open joint method is to favor structure setting therefore consenting a better overall adaption of the flooring to the technical-structural variations.

"EXPANSION JOINTS" (Fig. 2 and 3): they are extremely important and a lot of attention must be given towards their realization.

They are needed to compensate variations or deformations and they allow thermal and hygroscopic expansions of the mortar bed.



Laying

The flooring can be laid either traditionally with cement or with adhesive.

1) In the event of traditional laying, this will be achieved in the same way as a normal ceramic floor by adapting certain expedients:

- The material should not be immersed in water before laying;
- The cement dusting must be increased to 5-8 Kg/m²;
- Tap the floor with the appropriate device until liquid cement escapes from the gaps.

2) When laying with adhesives, which is preferable, we recommend, using cement-based or organic adhesives with the addition of resinous latex additives:

- Preparing the subsurface thoroughly: ensure that it is perfectly flat, without cracks and well cleaned.
- Preparing the adhesive: mix all ingredients mechanically or by hand, leaving to stand for about 10-15 minutes.
- Applying the adhesive and laying the tiles: spread with a special notched spreader over small areas; apply the tiles by pressing on the surface: try to detach a few tiles to check adhesion.

Grouting the joints

It is necessary to take into consideration that, while preparing the grout, the dosage of water (and/or latex) must strictly follow the instructions without diluting it excessively and that grouts must be selected according to their granulometry and depending on the width of the grout lines. After grouting using cement grouts (for epoxy grouts the procedure is totally different therefore please consult our on-line handbook or that of the manufacturer), it is necessary to wait for a short period of time, ranging from a few minutes to a few hours depending on weather conditions, until the grout becomes opaque, then it is possible to proceed with the removal of excess grout using a clean and slightly wet sponge. After a period of around 48 hours, the first cleaning of the entire tiled surface can be carried out.

The grouting of the joints must be done the day after the laying. The joints must be completely clean throughout their entire body. The underside and edges of the tile must be carefully soaked. The grouting and the jointing must be performed with prepared grout found on the market. The joints are normally grouted with rubber spatulas, letting the grout penetrate the depths. Everything is left to dry. When the sealant starts to take hold, the excess should then be removed with a wet sponge.

N.B.: It is not advised to use sand or sawdust that digs into and removes the grout that is still fresh from the joints. We also advise against the use of colored grouts that, if not removed in the appropriate amount of time, can leave deposits on the tiles that are difficult to remove. For more detailed information, consult www.lcusa.com.

Final floor cleaning

First floor deep cleaning after installation

After Grouting the Joints (pic. 1) It is important to remove the excess grout with a sponge and clear water (pic. 2). After 12/48 hours, the grout in the joints will have "set up"/hardened significantly. There will be a noticeable residual "haze". Typically, a diluted acid cleaner specifically for removing "Grout Haze", combined with a soft scrubbing pad will remove the majority if not all the "Haze". Change your acid/water solution frequently for best results. It is also recommended to keep a bucket of clean water to remove the acid/water solution. It is recommended to keep and use clean dry towels to help remove as much residual water and keep the floor as dry as possible.

Please refer to the cleaning chemical company's suggested methods and dilution rates. (pic. 3). For areas with excess grout or grout that becomes adhered to the face of the tile, further cleaning with an Acid/Water Solution may be necessary. Please refer to the Cleaning Chemical Company's instructions as not all acids or chemicals are the same.

The excess grout residue (pic. 4-5) must be removed so that it does not dry and stick on the surface. It is necessary to change the cleaning water frequently and rinse well. Care must be taken on inlayed, polished and especially Anti Slip products similar to Frontier20. The use of a floor-washing machine combined with the use of a diluted acid detergent helps reach the spaces between adjacent tiles and clean them properly. If such a cleaning procedure is not carried out, or if such cleaning is carried out too late, the grout residue creates an absorbent film, which holds dirt, making the surface difficult to clean: in this case, **Landmark Ceramics** will not be liable for any damage caused to the surface.

Ordinary cleaning

Ordinary maintenance must be carried out using specialized detergents to remove stains but these detergents must not leave a wax, film or membrane residue. Rinsing well with plenty of clean water is a fundamental part of the cleaning procedure, therefore we advise against the use of products which state that they "do not need rinsing".

Other recommendations

Bright colored products, in particular white and extra-white tiles, are very delicate and, although for all intent and purpose are hygienically clean, However, they can get dirty more easily than darker tiles. It is therefore necessary to remember that these particular products require careful regular maintenance. Sealers are unnecessary. Sealing will change the D.C.O.F. (Dynamic Co-efficient of Friction) resulting in a surface that will become more slippery. Also because Porcelain has such a low absorption the sealer will unlikely stick and most likely the sealer will flake off over time.



PIC 1.
Fill joint with grout.



PIC 2.
Remove excess grout with clean water.



PIC 3.
Add specific acid cleaning agent for porcelain tile to clean water.



PIC 4.
First floor deep cleaning after 12/48 h from installation.



PIC 5.
Removal of excess grout residues with hard brush.

TYPE OF STAIN	SOLUTION	DETERGENTS	MANUFACTURER
INORGANIC STAINS			
Cement Carbon Calcium Efflorescence Chalk Metallic residues Rust Cement-based grout Colored grout Wall paint	Acid	DETERGENT WITH AN ACID BASIS *	
		DETERDEK or similar	UNITED STATES > Fila Chemicals USA, Corp. 10800 N.W. 21st Street #170 Miami, FL 33172 USA Tel. +1-305-513-0708 email filausa@filasolutions.com
		KERANET (liquid) or similar	MAPEI Americas Headquarters 1144 E. Newport Center Drive Deerfield Beach, Florida 33442
ORGANIC STAINS			
Coca Cola Ice Cream Coffee Wine Beer Animal fats Vegetable fats Mustard Mayonnaise Ketchup Jam Linseed oil Lipstick Wax	Alkaline and neutral	LIMITED FOAM TYPE PRODUCT **	
		PS87 or similar	UNITED STATES > Fila Chemicals USA, Corp. 10800 N.W. 21st Street #170 Miami, FL 33172 USA Tel. +1-305-513-0708 email filausa@filasolutions.com
		FILACLEANER or similar	UNITED STATES > Fila Chemicals USA, Corp. 10800 N.W. 21st Street #170 Miami, FL 33172 USA Tel. +1-305-513-0708 email filausa@filasolutions.com
		Ammonium	Universal
RESIDUAL RINGS of organic nature	Saline solution	Sodium hypochloride (bleach for white laundry)	Universal
Silicone oils Machine Oil Resins and glazes Coal and natural rubber Encres et feutres		FILASOLV or similar	UNITED STATES > Fila Chemicals USA, Corp. 10800 N.W. 21st Street #170 Miami, FL 33172 USA Tel. +1-305-513-0708 email filausa@filasolutions.com
		Aceton	Universal
		NITRO - THINNER	Universal
		TURPENTINE	Universal
		TRICHLORETHYLENE	Universal
		CIF AMMONIACAL	Universal
		HAND CLEANSER	Universal
Tire		Ice+scraper	
Silicone and chewin-gum			

N.B. When using the above products, the instructions on the package should be followed.

* **Detergent with an acid base:** a detergent with an acid basis, specifically recommended after bath floor or wall installation, for the decalcification cleaning and the regular maintenance.

** **Limited foam type product:** a limited foam type product degreasing and general cleaning, suitable for all types of stains but especially for removal of vegetable and animal fats.

Warning

The above suggestions are a result of research, laboratory tests and several years' experience. However, the cleaning features of the materials may vary significantly according to the different installation methods, conditions of use, types of surface and destination. As a general rule, the higher the anti-slip values of the tiles are, the greater cleaning inconveniences may arise.

The professional operator in charge of maintenance and cleaning shall always check the surface condition before proceeding with any cleaning and/or maintenance operation (we would suggest to test some tiles before installation). **Landmark Ceramics** declines any liability with reference to cleaning and maintenance operations in case of heavy conditions of use (such as mechanical workshop or spaces presenting oily residues or tire marks), bad installation work or wrong cleaning operations, it is agreed that **Landmark Ceramics** shall not be liable for any event, damage or defect due to wrong installation of the tiles, faulty cleaning and maintenance operations or inadequate choice of the type of material to be laid or of the adhesives used in a certain destination of use.

Tones of samples

Landmark Ceramics reserves the right to modify the products illustrated in this catalog for reasons of production or to improve quality. Samples are purely indicative. Packaging and weights may vary for production reasons. Contact our sales department when ordering.



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