THERMORY®

Installation Guide

Decking modules

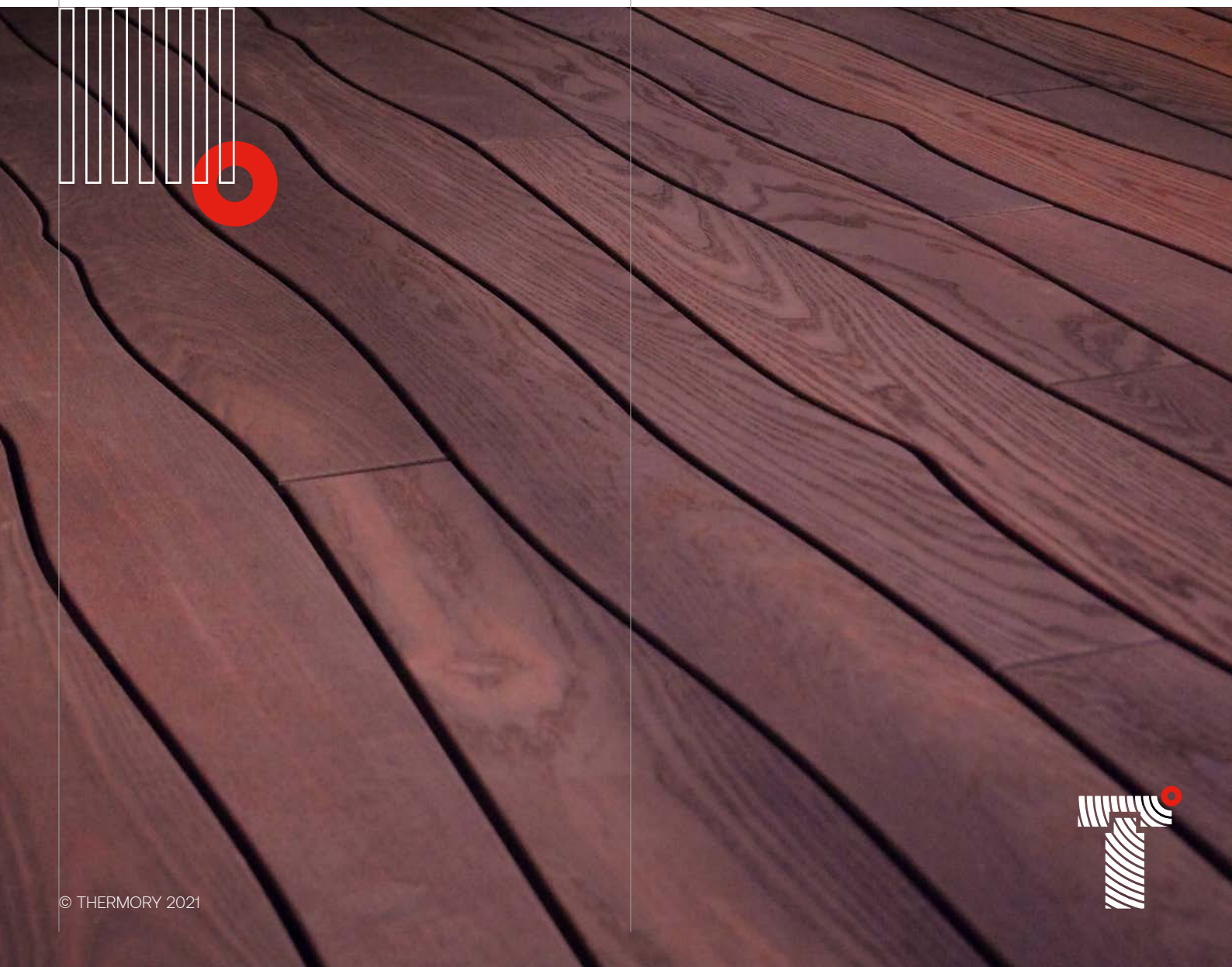
FLOW BY THERMORY decking combines the dimensional stability, durability, rich dark tone and gorgeous grain of thermo-ash with the stunning curved design from Flow. Create a beautiful decking surface with no visible screws.

THERMORY® decking products undergo an intense thermal modification process that makes the wood more durable and stable in outdoor conditions while emphasizing its warm golden-brown color and characteristic wood pattern.

Using the correct installation and maintenance techniques will result in the most beautiful and long-lasting decking.

These installation guidelines are purely informative and based on the best knowledge currently available, and they should be used accordingly. We advise you to follow the regulations of your country where they conflict with the general recommendations found in this guide.

FLOW by THERMORY®



1. Flow by Thermory decking modules

FLOW by THERMORY®

Make waves on your deck!

The complex design and production process create the curves by machining the boards, piece by piece, into six different shapes.

Each Thermory Flow six-piece curved decking module slots perfectly into the next, creating an endless repeating pattern with a natural look..

The installation is easy to do with Thermory TENI® clips which create a beautiful decking surface with no visible screws.

Using the correct installation and maintenance techniques will result in the most beautiful and long-lasting Thermory decking.

THERMALLY MODIFIED WOOD
Naturally enhanced using only heat & steam

STABILITY
Dimensionally stable in changing weather conditions

WALK BAREFOOT
The decking doesn't overheat in the sun

HIGH DURABILITY
Thermo-ash for 25+ years of rot resistance

SUSTAINABLE
Responsibly harvested and chemical-free modification

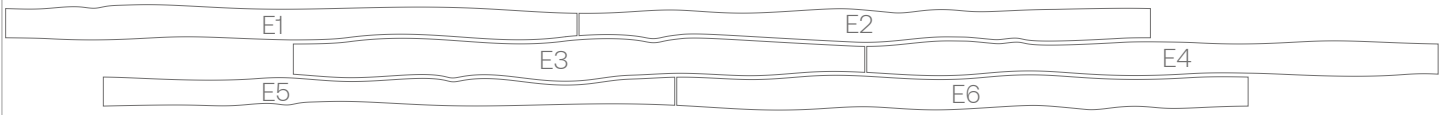
EASY INSTALLATION
Ingeniously simple fixing methods

FLOW BY THERMORY
six-piece decking module

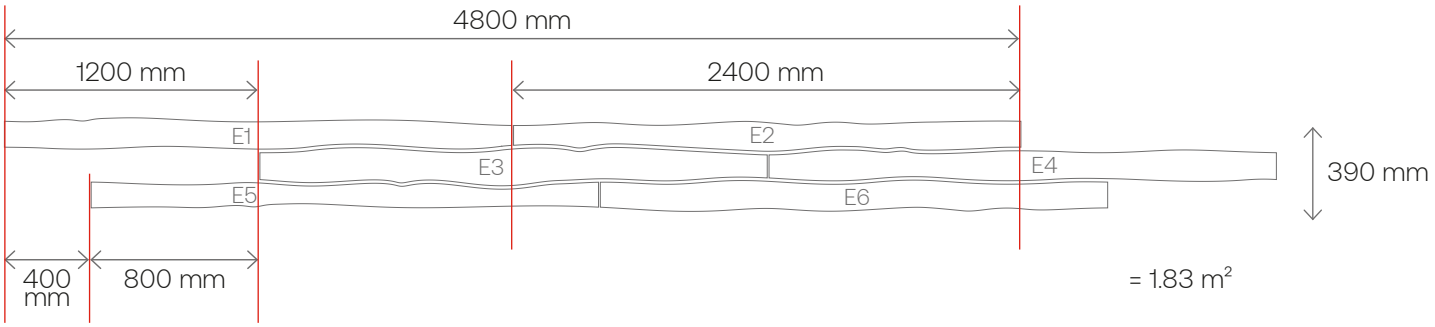
PACKAGING:
Six boards per pack, covering an area of 1.83 m².

Thermory Flow deck boards are 20 mm thick and 90–180 mm wide.

The fixed length of the boards is 2397 mm.



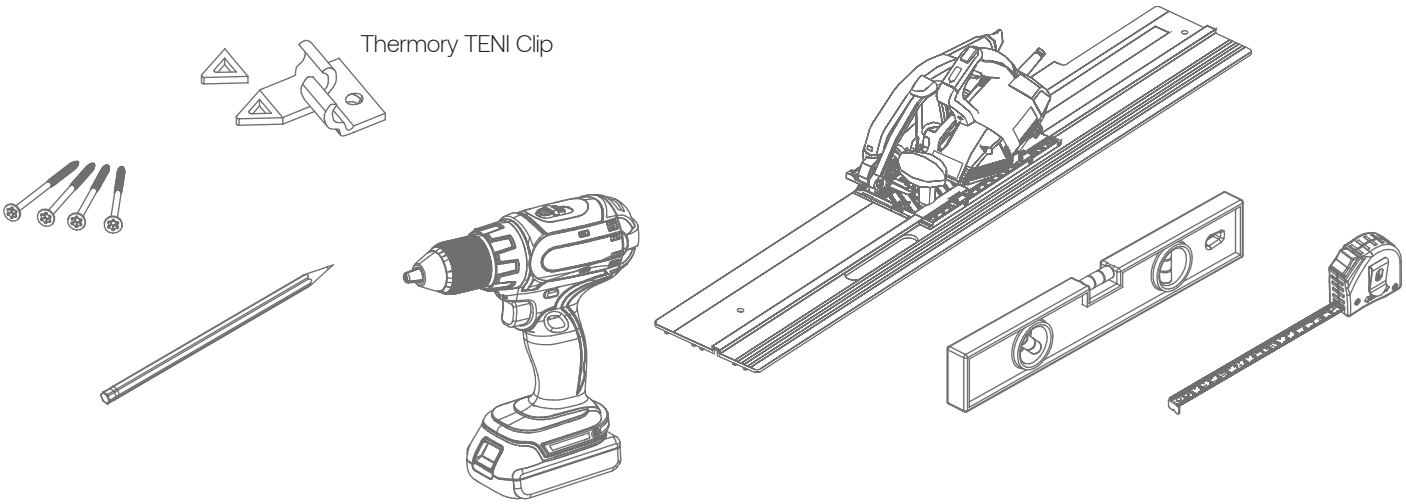
Module E



2. Storage

Whenever possible, Thermory decking boards should be stored inside. The decking should be kept away from sunlight as UV rays will cause the color to fade. If kept outside, the boards should be elevated at least 150 mm from the ground, stacked evenly, and protected with a waterproof, light-impermeable cover. Leave the ends of the cover unfastened to provide ventilation while avoiding moisture damage. Thermory decking should never be left in the rain or exposed to excess moisture when in its original packaging, as it will not dry properly when tightly packaged. If possible, store the boards at the installation site for a few weeks prior to installation to allow them to acclimatize to the moisture conditions, using a protective cover to prevent moisture damage.

3. What you need



REQUIRED NUMBER OF TENI CLIPS:

3 clips per one linear meter of decking board. Clips per wholesale packaging: 100 pcs, including screws

4. Building a proper substructure and avoiding moisture damage

WATCH THE INSTALLATION VIDEO →

Substructure

- Thermory Flow decking must be laid on leveled joists.
- We recommend using Thermory Benchmark thermo-spruce, thermo-pine or metal joists – this will ensure that your joists last as long as your decking.
- When connecting two boards lengthwise, make sure that the ends of both boards are laid on separate joists if the width of the joists is less than 80 mm (as shown in the Thermory decking installation video); otherwise the fixings will be placed too close to the ends of the boards.
- Joist spacing must be 400mm from centre to centre (from edge to centre on the first and last joist) as shown on page 6.

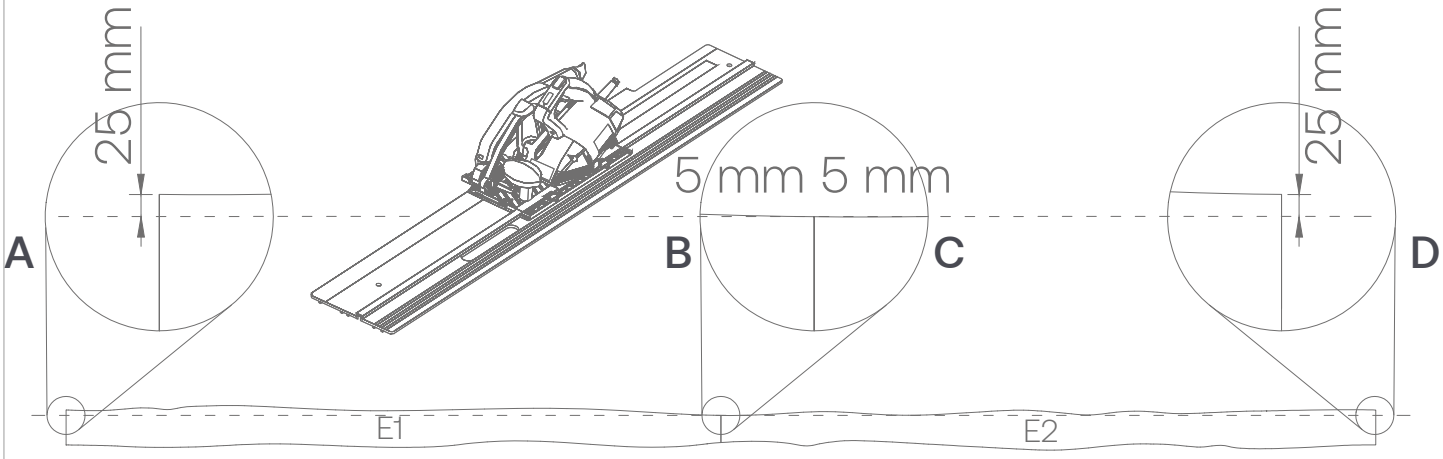
Avoiding moisture damages

- Good drainage is essential in order to direct water away from the structure. Make sure the ground beneath your decking is at a sufficient angle to avoid water pooling.
o It is important that air can circulate underneath the decking. Do not allow moisture to become trapped beneath it.
- Decking boards should lay at least 100 mm above the ground. The best practice is to shim the joists to allow air circulation and drying.
- The ends and sides of the Thermory deck must be left open to allow air circulation. When using skirting boards, install them with air gaps and leave a space of at least 50 mm from the ground. When the decking is next to a wall, we suggest leaving a gap of at least 20 mm between the wall and the decking.
- We suggest covering the top of the joists with UV-resistant decking tape to avoid moisture damage.
- Wood must not be in direct contact with wood.
- When installing Thermory Flow decking boards, leave a space of 3 mm between board ends. This allows for air circulation and prevents swelling due to trapped moisture.
- Sealing the ends of the boards with an end grain sealer or oil is always recommended in order to ensure a longer lifespan for the decking.

5. Installation

Thermory Flow installation is easy to do with Thermory TENI® clips which create a beautiful decking surface with no visible screws.

- TENI clips are made of a UV and water-resistant material (polyoxymethylene) that is optimized for outdoor conditions. The clips leave a 6-mm gap between the boards.
- The 4.2 x 45 mm stainless-steel screw is included with the clip and is suited to timber and RELO T aluminum joists. With any other aluminum joists, it is necessary to either use special self-tapping screws or drill pilot holes.
- The clip thickness provides an 8-mm distance between the board and the joist and prevents wood-to-wood contact to ensure the required ventilation.

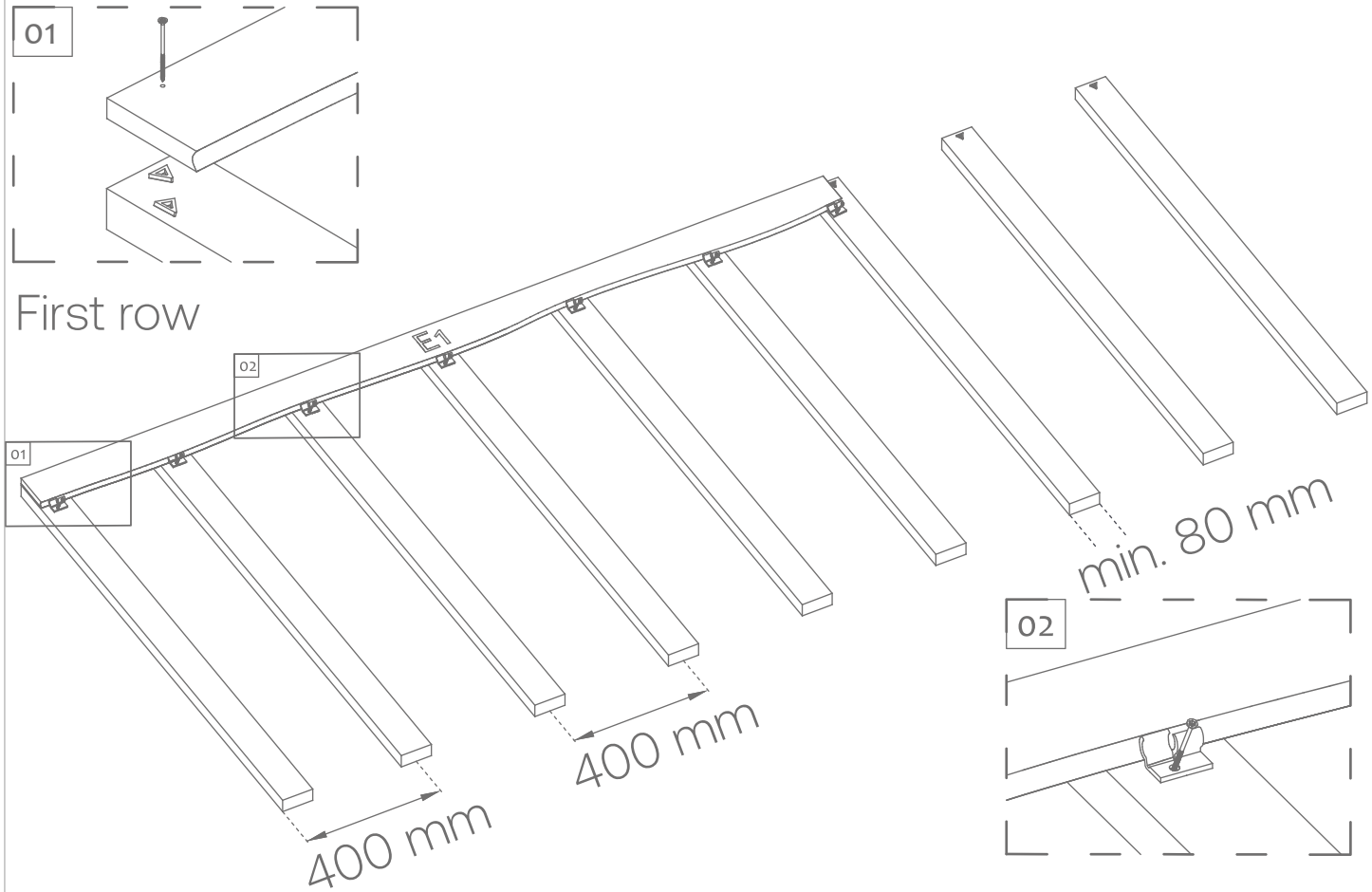


First row

Starting the installation:

1. Use two triangle-shaped corners.
Pre-drill and then face screw the outside edge of the first and last rows of boards using stain**less-steel screws.**
Upon installation, remove the triangular corner of the clip – use this corner to achieve a consistent height for the first and last rows of boards.

2. Place the TENI® clip under the board and press firmly into the groove. Insert the screw into the hole of the clip and then fasten.

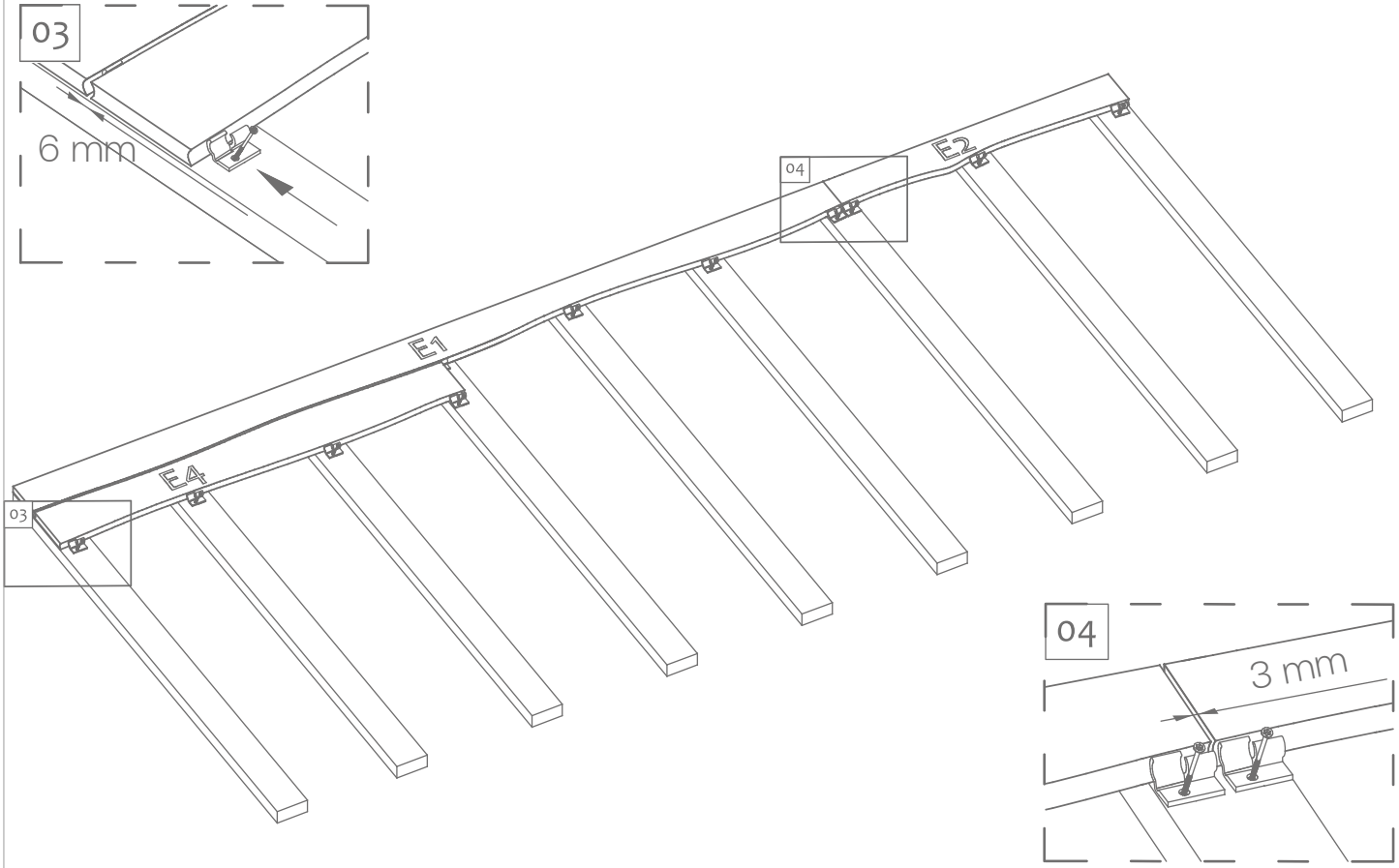


3. Lay the next row of boards. When tightening the next board, ensure there is a 6 mm gap between boards. Fasten the screw.

4. When installing two boards lengthwise, make sure that the ends of both boards are laid on separate joists if the width of the joists is less than 80mm. Leave a space of 3 mm between board ends. This allows for air circulation and prevents swelling due to trapped moisture.

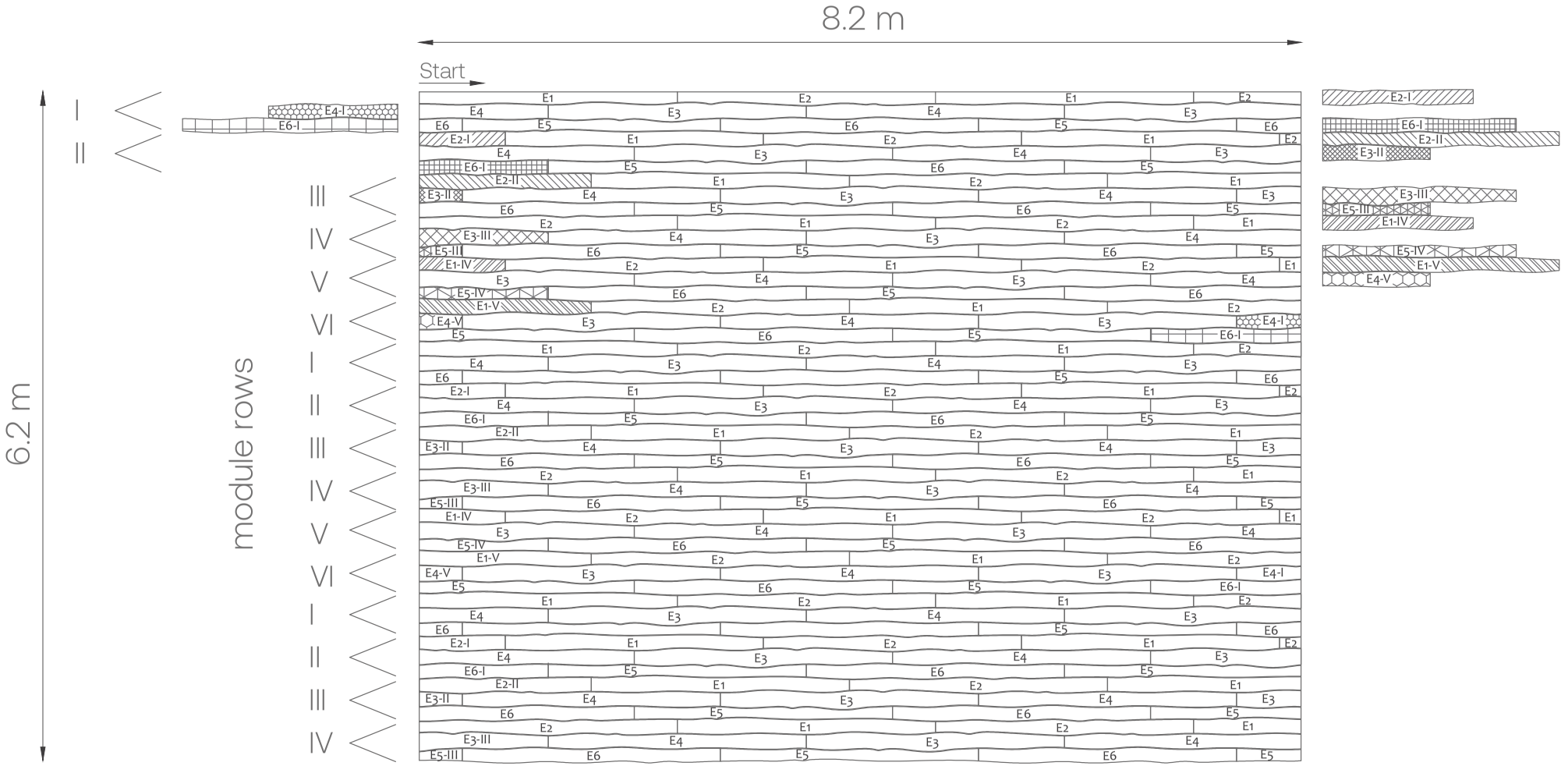
Replacing individual boards fastened with TENI® clips at a later date requires little effort, and the adjacent boards do not need to be removed.

To remove a single board, you simply need a prying bar. Insert the prying bar between the boards and then carefully lift the board to remove it. You can then click the replacement board into position, or place the original board back if it is undamaged.



6. Layout example for deck size 6.2 x 8.2 m

FLOW by THERMORY®



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7. Placement of leftover cuts

PLACEMENT OF LEFTOVER CUTS FROM BOARDS BETWEEN MODULE ROWS																	
AREA LENGTH (METERS), WITHIN										BOARD NUMBER					
FROM	UP TO	FROM	UP TO	FROM	UP TO	FROM	UP TO	FROM	UP TO	E1	E2	E3	E4	E5	E6
		4.8	5.2	9.6	10.0	14.4	14.8	19.2	19.6	I-VI; V-VI	II-III; III-IV	III-IV; IV-V	I-II; I-VI	IV-V; V-VI	I-II; II-III
		5.2	5.6	10.0	10.4	14.8	15.2	19.6	20.0	I-VI; V-VI	II-III; III-IV	III-IV; IV-V; V-VI	I-II; I-II; III-VI	I-VI; IV-V; V-VI	I-II; II-III; III-IV
		5.6	6.0	10.4	10.8	15.2	15.6	20.0	20.4	I-V; II-VI	II-IV; III-V	III-V; IV-VI	I-III; II-VI	I-V; IV-VI	I-III; II-IV
		6.0	6.4	10.8	11.2	15.6	16.0	20.4	20.8	I-V; II-VI	II-IV; III-V	I-V; III-V; IV-VI	I-III; II-IV; II-VI	I-V; II-VI; III-VI	I-III; II-IV; III-V
		6.4	6.8	11.2	11.6	16.0	16.4	20.8	21.2	II-V; III-VI	II-V; III-VI	I-IV; III-VI	I-IV; III-VI	I-VI; II-V	I-VI; II-V
2.0	2.4	6.8	7.2	11.6	12.0	16.4	16.8	21.2	21.6	II-V; III-VI	II-V; III-VI	I-IV; II-V; III-VI	I-IV; II-V; III-VI	I-IV; II-V; III-VI	I-IV; II-V; III-VI
2.4	2.8	7.2	7.6	12.0	12.4	16.8	17.2	21.6	22.0	III-V; IV-VI	I-III; II-VI	I-III; II-IV	I-V; IV-VI	II-IV; III-V	I-V; II-VI
2.8	3.2	7.6	8.0	12.4	12.8	17.2	17.6	22.0	22.4	III-V; IV-VI	I-III; II-VI	I-III; II-IV; III-V	I-V; II-VI; IV-VI	II-IV; III-V; IV-VI	I-V; I-III; II-VI
3.2	3.6	8.0	8.4	12.8	13.2	17.6	18.0	22.4	22.8	IV-V; V-VI	I-II; II-III	II-III; III-IV	I-VI; V-VI	III-IV; IV-V	I-VI; I-II
3.6	4.0	8.4	8.8	13.2	13.6	18.0	18.4	22.8	23.2	IV-V; V-VI	I-II; II-III	II-III; III-IV; IV-V	I-VI; I-II; V-VI	III-IV; IV-V; V-VI	I-VI; I-II; II-III
4.0	4.4	8.8	9.2	13.6	14.0	18.4	18.8	23.2	23.6	V-V; VI-VI	II-II; III-III	III-III; IV-IV	I-I; VI-VI	IV-IV; V-V	I-I; II-II
4.4	4.8	9.2	9.6	14.0	14.4	18.8	19.2	23.6	24.0	V-V; VI-VI	II-II; III-III	III-III; IV-IV; V-V	I-I; II-II; VI-VI	IV-IV; V-V; VI-VI	I-I; II-II; III-III

EXPLANATION:

For example: Room length 8.2 m. For E5 boards use: III-IV; IV-V solution. Use the leftover piece cut from either the first or last E5 board in module row III as the last or first E5 board respectively in module row IV, and use the leftover piece of board E5 cut for module row IV for the beginning or end of module row V.

If there are several leftovers cut from the same end of the same board number, always use the shortest one that fits the void.

8. Purchase guide

FLOW BY THERMORY PURCHASE GUIDE – NUMBER OF 1.83 M² MODULES TO BE PURCHASED ACCORDING TO DECK DIMENSIONS:																		
DECK WIDTH UP TO M	MODULE ROWS	DECK LENGTH UP TO M																
		2.4	3.6	4.8	6	7.2	8.4	9.6	10.8	12	13.2	14.4	15.6	16.8	18	19.2	20.4	21.6
0.37	I	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5
0.76	II	2	2	2	4	4	4	4	6	6	6	6	8	8	8	8	10	10
1.15	III	3	3	3	5	6	6	6	8	9	9	9	11	12	12	12	15	15
1.54	IV	3	4	4	6	7	8	8	10	11	12	12	14	15	16	16	18	19
1.93	V	3	5	5	7	8	10	10	12	13	15	15	17	18	20	20	22	23
2.32	VI	3	5	6	8	9	11	12	14	15	17	18	20	21	23	24	26	27
2.71	I	4	6	7	10	11	13	14	17	18	20	21	24	25	27	28	31	32
3.10	II	5	7	8	12	13	15	16	20	21	23	24	28	29	31	32	36	37
3.49	III	6	8	9	13	15	17	18	22	24	26	27	31	33	35	36	41	42
3.88	IV	6	9	10	14	16	19	20	24	26	29	30	34	36	39	40	44	46
4.27	V	6	10	11	15	17	21	22	26	28	32	33	37	39	43	44	48	50
4.66	VI	6	10	12	16	18	22	24	28	30	34	36	40	42	46	48	52	54
5.05	I	7	11	13	18	20	24	26	31	33	37	39	44	46	50	52	57	59
5.44	II	8	12	14	20	22	26	28	34	36	40	42	48	50	54	56	62	64
5.83	III	9	13	15	21	24	28	30	36	39	43	45	51	54	58	60	67	69
6.22	IV	9	14	16	22	25	30	32	38	41	46	48	54	57	62	64	70	73
6.61	V	9	15	17	23	26	32	34	40	43	49	51	57	60	66	68	74	77
7.00	VI	9	15	18	24	27	33	36	42	45	51	54	60	63	69	72	78	81
7.39	I	10	16	19	26	29	35	38	45	48	54	57	64	67	73	76	83	86
7.78	II	11	17	20	28	31	37	40	48	51	57	60	68	71	77	80	88	91
8.17	III	12	18	21	29	33	39	42	50	54	60	63	71	75	81	84	93	96
8.56	IV	12	19	22	30	34	41	44	52	56	63	66	74	78	85	88	96	100
8.95	V	12	20	23	31	35	43	46	54	58	66	69	77	81	89	92	100	104
9.34	VI	12	20	24	32	36	44	48	56	60	68	72	80	84	92	96	104	108
9.73	I	13	21	25	34	38	46	50	59	63	71	75	84	88	96	100	109	113
10.12	II	14	22	26	36	40	48	52	62	66	74	78	88	92	100	104	114	118
10.51	III	15	23	27	37	42	50	54	64	69	77	81	91	96	104	108	119	123
10.90	IV	15	24	28	38	43	52	56	66	71	80	84	94	99	108	112	122	127
11.29	V	15	25	29	39	44	54	58	68	73	83	87	97	102	112	116	126	131
11.68	VI	15	25	30	40	45	55	60	70	75	85	90	100	105	115	120	130	135

EXAMPLE: A deck 12 meters long and 7 meters wide requires 45 modules.

As a standard practice with any decking product always purchase 5–10% more to compensate for material loss due to installation procedures and subconstruction imperfections.

- Find the appropriate number of modules to be purchased according to desired installation dimensions.
- One module coverage (1.83 m²) can be used for rough purchase estimates.
- Always purchase extra materials (+10%) to ensure flawless installation.

FLOW by THERMORY®

9. Decking maintenance

After installing your decking, it is important to keep its surface free of leaves, needles and other moisture-retaining debris that can promote mold.

Please follow the **Thermory Decking Maintenance Guide** for more detailed tips.

Like any wood products, thermally modified wood will also turn gray over time

This process starts immediately after the products are installed and takes from a few months to a few years, depending on the effects of UV radiation.

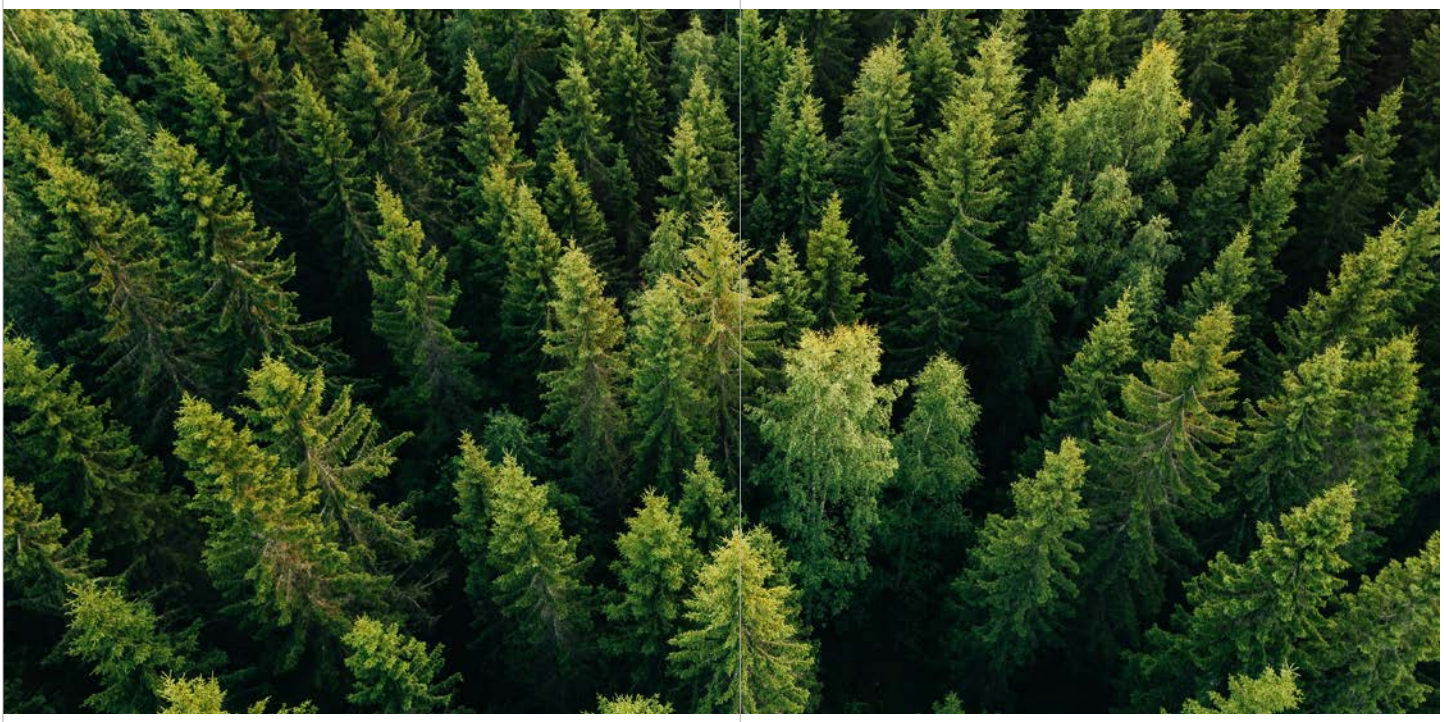
- To reduce discoloration or freshen up their appearance, Thermory boards can be protected by coating them with a UV-resistant pigmented mineral oil. The use of organic oils is not recommended outdoors or in damp rooms, as they contain substances that provide a source of nutrition for biological organisms, such as bacteria, mold, etc.
- If you want the wood to turn gray over time while still minimizing natural cracking, finish the wood with a pigment free oil.

Thermo-ash after installation

Thermo-ash, aged and unoiled

Cleaning thermally modified wood

- Thermally modified wood can be washed with a wood cleaner and warm water. Before applying wood cleaner, thoroughly sweep the deck to remove all dirt and debris. Larger dirt particles can be removed mechanically (for example with a washing brush or deck cleaning machine).
- For rinsing, it is a good idea to use a garden hose with a spray nozzle in a soft shower setting; test it on a small area beforehand. A strong jet of water can damage the wood material and result in an uneven appearance..



Leave a lasting impact

THERMORY is a world leader in the thermal modification of wood. We offer high-quality, long-lasting solutions that benefit from environmentally friendly technology. We have spent the past two decades developing our expertise through close collaboration with architects, designers, builders and homeowners – constantly revising our product selection and refining our technology in the process.

THERMORY promotes a transparent and responsible corporate culture. We care about the environment and treat nature with deep respect. Our purchasing process is environmentally responsible, and we exercise high standards for quality and sustainability. Our timber is carefully inspected and harvested from sustainably managed forests.

- DECKING
- CLADDING
- INTERIOR
- SAUNA

If desired, we can offer PEFC, FSC or Nordic Swan Ecolabel-certified wood.

PEFC PEFC/19-31-11
FSC www.fsc.org FSC® C074560 The mark of responsible forestry
NORDIC SWAN ECOLABEL 4086 0010 Durable wood for outdoor use

As a renewable resource that is both durable and an excellent insulator, wood is one of the most environmentally friendly choices for your construction projects. If you think it's important to protect our valuable resources long into the future, then we're on the same mission. We create lasting value, because we want to leave behind a more harmonious and sustainable world.

REAL WOOD PRODUCTS WITH BEAUTY AND STABILITY IN EVERY FIBER