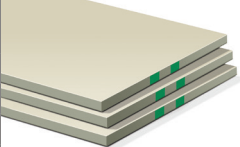


## Installation Guide

HARDIEFLEX® SENEPA BOARD SIZES				
	LENGTH (MM)	WIDTH (MM)	THICKNESS (MM)	PRODUCT CODE
 Residential or Commercial	2438	254	9.0	404341
	2438	254	12.0	404338
	2438	305	12.0	404337
	3660	305	12.0	404445

### KEY FEATURES



\*HardieFlex® boards are suitable for use where non-combustible materials are required and, do not contribute to flame spread.

The above performance claims are subject to the product being installed and maintained correctly in accordance with James Hardie's published literature current at the time of installation.

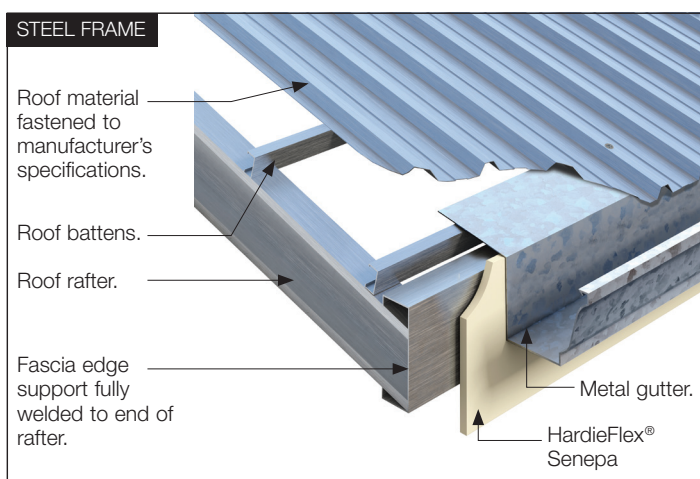
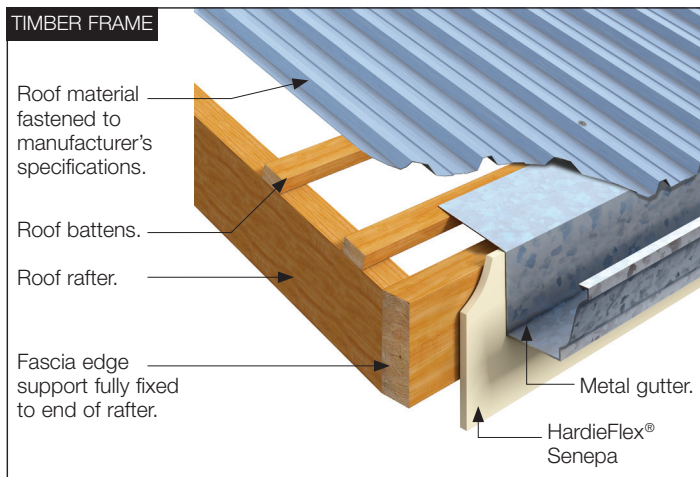






Figure 1: HardieFlex® Senepa Overview

COMPONENTS SUPPLIED BY JAMES HARDIE	
	<b>HardieDrive® Screws</b> Use HardieDrive® Screw 25mm for 9.0mm boards Use HardieDrive® Screw 32mm for 12.0mm boards
	<b>HardieFlex® Saw Blade</b> Used for easy cutting of thick HardieFlex® boards

COMPONENTS NOT SUPPLIED BY JAMES HARDIE	
	<b>Polyurethane (PU) sealant</b> Paintable, exterior grade polyurethane joint sealant for sealing around the joints and gaps.
	<b>Wood screw or 50mm galvanized nails</b> Used for fixing HardieFlex® boards on timber frame.

### WARNING - DO NOT BREATHE DUST AND CUT ONLY IN WELL VENTILATED AREA

**DANGER:** May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product. Refer to the current product Safety Data Sheet before use. The hazard associated with fiber cement arises from crystalline silica present in the dust generated by activities such as cutting, machining, drilling, routing, sawing, crushing, or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust. When doing any of these activities in a manner that generates dust you must: (1) wear appropriate respiratory protective equipment compliant with OSHA standards for silica dust or particulates such as, but not limited to NIOSH approved P1, P2 or P3 respirators; (2) follow James Hardie cutting instructions as per our Best Practice Guidelines to reduce or limit the release of dust; (3) warn others in the area to avoid breathing the dust; and (4) when using mechanical saws or high speed cutting tools, work outdoors and use dust collection equipment while still wearing the appropriate respiratory protective equipment. During clean-up, use a well maintained high-efficiency particulate (HEPA) vacuum and filter appropriate for capturing fine (respirable) dust or use wet clean-up methods – never dry sweep. For further information, refer to our installation instructions and Safety Data Sheets available at [www.jameshardie.com.ph](http://www.jameshardie.com.ph). **FAILURE TO ADHERE TO OUR WARNINGS, SAFETY DATA SHEETS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.**

### JAMES HARDIE RECOMMENDED SAFE WORKING PRACTICES

#### CUTTING OUTDOORS

1. Position cutting station so wind will blow dust away from the user or others in working area.
2. Use a dust reducing circular saw equipped with HardieFlex® Saw Blade and HEPA vacuum extraction.

#### SANDING / DRILLING / OTHER MACHINING

When sanding, drilling or machining you should always wear a P1 or P2 dust mask and warn others in the immediate area.

#### IMPORTANT NOTES

1. NEVER use a power saw indoors.
2. NEVER use a circular saw blade that does not carry the HardieFlex® Saw Blade logo.
3. NEVER dry sweep - Use wet suppression or HEPA vacuum.
4. NEVER use grinders.
5. ALWAYS follow tool manufacturers' safety recommendations.

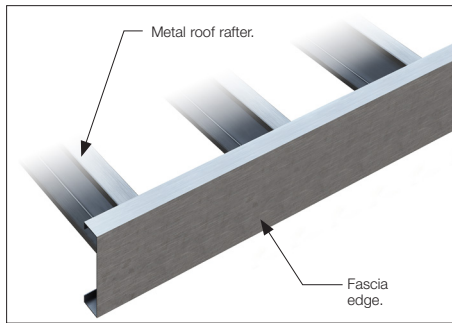
#### COMPONENTS NOT SUPPLIED BY JAMES HARDIE

James Hardie recommends the following products for use in conjunction with HardieFlex® Senepa. James Hardie does not supply these products and does not provide a warranty for their use. Please contact the component manufacturer for information on their warranties and further information on their products.

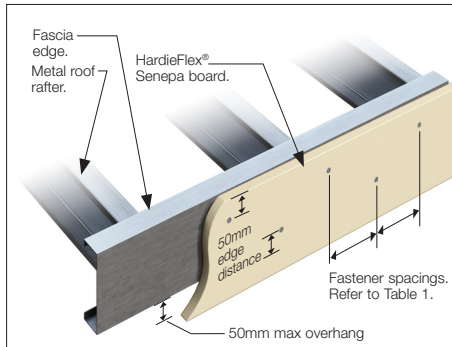
### STORAGE AND HANDLING

To avoid damage, all James Hardie building products should be stored with edges and corners of the boards protected from damage. James Hardie building products must be installed in a dry state and protected from weather during transport and storage. The stored product must be laid flat under cover on a smooth level surface clear of the ground to avoid exposure to water, moisture, etc. Protective gloves must be worn while handling boards.

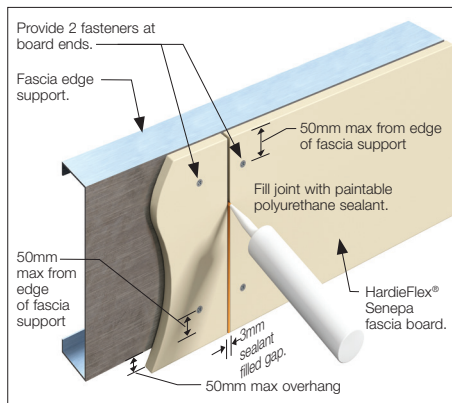
## INSTALLATION PROCEDURE



1 Ensure frame is square and straight. A suggested tolerance of 3mm to 4mm in any 3m length will give best results.



2 Install HardieFlex® Senepa board using the recommended fastener size and spacing.



3 Leave 3mm gap in between boards. Apply PU sealant on the gap.

## GENERAL

### Timber Frame

Use only seasoned (kiln-dried) timber. Unseasoned timber is prone to shrinkage and may cause the frames to move.

### Steel Frame

Steel frame must be in the range of 1.0mm to 1.5mm BMT. Steel sections should be galvanized or zincalume.

### Fastener

Refer to Table 1 and Figure 2 for fastener spacing and placement. Ensure that fasteners are neither over-driven nor under-driven. Note: Ensure that the maximum board overhang is 50mm.

### Termination

When HardieFlex® Senepa boards are fastened adjacent to different material, leave a gap equal to the thickness of the board then fill the gap with PU Sealant.

### Painting

Before application of any paint finish, remove any sanding dust and ensure surface is ready for paint application.

### Maintenance

Cleaning and maintaining of the finished surface, joints, junctions, penetrations etc., must be carried out at regular intervals.

Table 1 HardieFlex® Senepa Minimum Fastener Spacing

Exposure Category	West Zone		East Zone	
	Steel Frame	Timber Frame	Steel Frame	Timber Frame
	Screw Spacing (mm)	Nail Spacing (mm)	Screw Spacing (mm)	Nail Spacing (mm)
B (0m-24m)	300	175	225	150
C (0m-9m)	225	125	175	100
C (0m-24m)	175	100	125	75

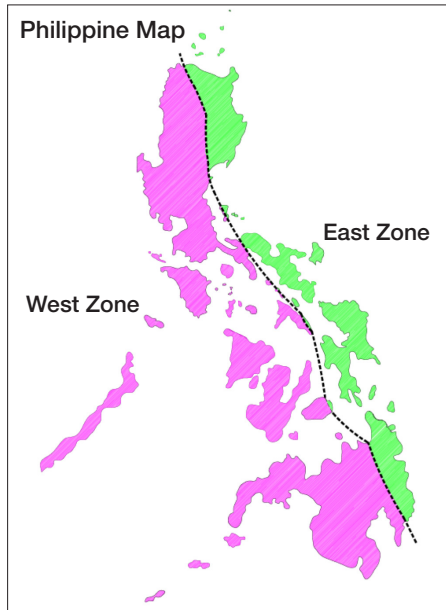


Figure 2: Guide on Wind Zones

## Wind Zones

Wind Zones shown on Figure 2 will be used to determine fastener spacing. Determine the project location and check whether it falls on east or west zone. Then, identify exposure category to get the maximum fastener spacing.

## Exposure Category

Exposure category refers to the surface roughness of surrounding terrain. Use Exposure Category B if the surrounding terrain have numerous closely spaced obstructions within 790m of the building. Otherwise use Exposure Category C (except for open sea or flat and unobstructed area).

## 10 YEAR WARRANTY

James Hardie Philippines Inc. ("James Hardie") warrants to the first purchaser of HardieFlex® Senepa boards ("Product") from James Hardie and the last purchaser of the Product prior to installation that, subject to compliance with the Conditions of Warranty below:

- for a period of 10 years from the date of purchase, the Product will be free from defects due to defective factory workmanship or materials; and
- for a period of 10 years from the date of purchase, the Product will be resistant to damage from cracking, moisture, rotting, fire, and termites to the extent set out in James Hardie's relevant published literature current at the time of installation; and
- for a period of 12 months from the date of purchase that the accessories supplied by James Hardie will be free from defects due to defective factory workmanship or materials. For the purposes of this warranty, a "defect" in respect of the Product means a non-compliance with AS/NZS 2908.2:2000 Cellulose-cement products – Flat boards.

## CONDITIONS OF WARRANTY

This warranty is strictly subject to the following conditions:

- James Hardie will not be liable for breach of this warranty unless the claimant provides proof of purchase of the Product and makes a written claim to James Hardie at the address set out below, either within 30 days after the defect would have become reasonably apparent or, if the defect was reasonably apparent prior to installation, then the claim must be made prior to installation.
- The Product is subject to natural variation in finish as part of the manufacturing process. The builder/installer must ensure the Product meets aesthetic requirements before installation. Subject to the terms of this warranty, after installation of the Product, James Hardie is not liable for claims arising from aesthetic surface variations if such variations were, or would upon reasonable inspection have been, apparent prior to installation;

requirements before installation. Subject to the terms of this warranty, after installation of the Product, James Hardie is not liable for claims arising from aesthetic surface variations if such variations were, or would upon reasonable inspection have been, apparent prior to installation;

- This warranty cannot be relied upon by any other person and is not transferable.
- The Product must be installed and maintained strictly in accordance with the relevant James Hardie literature current at the time of installation and must be installed in conjunction with the components or products specified in the literature. To obtain copies of such literature visit [www.jameshardie.com.ph](http://www.jameshardie.com.ph) or email us at [phtechgroup@jameshardie.com.ph](mailto:phtechgroup@jameshardie.com.ph). Further, all other products, including coating and jointing systems, applied to or used in conjunction with the Product must be applied or installed and maintained strictly in accordance with the relevant manufacturer's instructions and good trade practice;
- The project must be designed and constructed in strict compliance with all relevant provisions of the current National Building Code of the Philippines, regulations and standards; if the claimant chooses to rely upon this warranty then the claimant's sole remedy under this warranty for breach of this warranty is (at James Hardie's option) that James Hardie will either supply replacement Product, rectify the affected Product or pay for the cost of the replacement or rectification of the affected Product;

f. James Hardie will not be liable for any losses or damages (whether direct or indirect) including property damage or personal injury, consequential loss, economic loss or loss of profits, arising in contract or negligence or howsoever arising. Without limiting the foregoing, James Hardie will not be liable for any claims, damages or defects arising from or in any way attributable to poor workmanship, poor design or detailing, settlement or structural movement and/or movement of materials to which the Product is attached, incorrect design of the structure, acts of God including but not limited to earthquakes, cyclones, floods or other severe weather conditions or unusual climatic conditions, efflorescence or performance of paint/coatings applied to the Product, normal wear and tear, growth of mold, mildew, fungi, bacteria, or any organism on any Product surface or Product (whether on the exposed or unexposed surfaces);

- All warranties, conditions, liabilities and obligations other than those specified in this warranty are excluded to the fullest extent allowed by law;
- If meeting a claim under this warranty involves re-coating of Product, there may be slight color differences between the original and replacement Product due to the effects of weathering and variations in materials over time and James Hardie is not liable for any such color differences.

## DISCLAIMER

The recommendations in James Hardie's literature are based on good building practice but are not an exhaustive statement of all relevant information and are subject to conditions set by James Hardie's published literature current at the time of installation. Further, as the successful performance of the relevant system depends on numerous factors outside the control of James Hardie (e.g., quality of workmanship and design), James Hardie shall not be liable for the recommendations in that literature and the performance of the relevant system, including its suitability for any purpose or ability to satisfy the relevant provisions of the National Building Code of the Philippines, regulations and standards.

## WE ARE HERE TO HELP

If you have any questions or inquiries about HardieFlex® products send us an email or message. Please include your name and contact details.

Email: [phtechgroup@jameshardie.com.ph](mailto:phtechgroup@jameshardie.com.ph)

Website: [www.jameshardie.com.ph](http://www.jameshardie.com.ph)

Facebook: [www.facebook.com/JamesHardiePH](http://www.facebook.com/JamesHardiePH)