

The metal sheeting and accessory products produced by Safintra are manufactured from the highest quality materials, and conform to the relevant South African National Standards. Safintra will not accept any form of liability for poor performance as a result of the incorrect or inferior fasteners being used in conjunction with their products. Ensure that all fasteners used in an installation are in accordance with Safintra's published recommendations.

CHOOSING THE CORRECT CLASS OF FASTENER

It is imperative when using superior corrosion resistant steel roofing, cladding and accessory materials that the performance of the fasteners used to fix these materials have the same or superior service life. Specifying the correct fasteners for these projects is critical for long term performance and aesthetics. The Fixtite™ fastener application guide table gives a general guide to the fastener metal type recommended for various Safintra steel roofing products. In the interest of quality assurance it is essential that fasteners used comply with the South African National Standard SANS 1273:2011.

FASTENER TYPES

There are two fastener designs to be considered for use with Safintra's materials:

- Fixtite™ self-drilling screws for fastening cladding to a building structure.
- Accessory fasteners for fastening roofing accessory items such as flashings.

Where accessory fasteners such as pop rivets are required, they should be manufactured from Aluminium when fastening Aluminium-Zinc coated steel. In the case of stainless steel, compatible stainless steel pop rivets must be used.

COMPATIBILITY

Fasteners containing elements of stainless steel, Lead, Copper, and Copper containing alloys (such as MONEL) should not be used in conjunction with Aluminium-Zinc coated steel or pre-painted steel.

WASHERS USED WITH FASTENERS

The rubber washer component of self-drilling screws must be manufactured from materials compatible with the roofing material.

Washers containing significant levels of conductive Carbon black fillers are NOT suitable for use with Aluminium-Zinc alloy coated and pre-painted Aluminium-Zinc coated products, particularly in marine environments. Therefore fasteners must be assembled with Carbon-black-free washers.

SHANK CORROSION

In certain applications the fastener may be exposed to a greater risk of corrosion as a result of specific environments (e.g. high condensation and specific service environments such as intensive animal farming). Under the South African National Standards, corrosion classification is based on the fastener heads rather than the shanks. It is advisable to enquire about the fastener's porosity rating if intended use will be under service specific conditions.

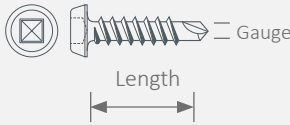
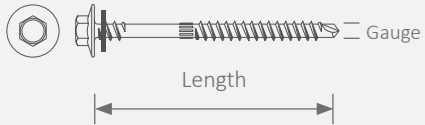
Corrosion class	C3 (Class 3)	C4 (Class 4)
Environment corrosion	Average	High
Outdoors	Atmospheres with moderate levels of airborne pollution. Coastal areas with low salt levels. Urban and industrial areas.	Atmospheres with discernible levels of airborne pollution processes. Industrial areas. Coastal areas with moderate salt levels.
Indoors	Areas with moderate levels of humidity and some airborne pollution from production processes. Laundries, breweries, dairies.	Areas with high levels of considerable airborne pollution from production processes. Chemical plants, swimming pools, dockyards.
Steel: Mass loss (g/m ² /year)	>200 - 400	>400 - 650
Thickness reduction (µm)	>25 - 50	>50 - 80
Zinc: Mass loss (g/m ² /year)	>5 - 15	>15 - 30
Thickness reduction (µm)	>0.7 - 2.1	>2.1 - 4.2
Recommended fastener material and minimum surface treatment	Fixtite™ Class 3	Fixtite™ Class 4

Note 1: For concealed fix applications, nothing less than Class 3 is recommended.

All Fixtite™ fasteners carry a manufacturer's warranty and comply with SANS1273-2011 (AS3566-2-2002) Standards.

All Safintra roof systems will only be warranted if installed with Safintra-approved fasteners.






HOW TO READ OUR FASTENER SIZES




Gauge (mm)	Threads per inch	Length	Wafer head	Hex head
12	14	75mm		
(Diameter of shank excluding thread) #8 - 4.2mm #10 - 4.8mm #12 - 5.5mm #14 - 6.3mm	Number of thread crests that can be counted along a lineal measurement of 1 inch (TPI).	Overall length of shank including drill point, up to shank beneath head.		

Note 2:

- All Safintra Fixtite™ fasteners provide optimal service life with Aluminium-Zinc coated steel.
- Different lengths/types of fasteners are available on request, including stainless steel.
- For optimal performance, the service life warranty of fasteners must match the service life warranty of the sheeting.
- Only Class 3 (concealed fix) and Class 4 fasteners are suitable for use with Aluminium-Zinc coated steel (unpainted or pre-painted).
- Class 4 coastal application should be discussed with Safintra's technical team for guidance.
- Only use stainless steel fasteners for Aluminium sheeting.

FIXTITE™ FASTENER APPLICATION GUIDE

Metal applications	
#10 x 22mm metal-fix wafer head square drive	
For concealed fix onto metal (Saflok 700®, Saflok 410® and Newlok™)	
#12 x 65mm metal-fix hex head washer flange, EPDM seal	
For trapezoidal onto metal (Tufdek® IBR, Widedek®, Fluteline® and Trimflute®)	
#12 x 38mm metal-fix hex head washer flange, EPDM seal	
For pierced fix onto metal (Classicorr® corrugated)	
#14 x 22mm metal-fix stitching screw, hex washer flange, EPDM seal, tapered	
For stitching of sheeting and flashings, and use with 5-5 clamps	
#12 x 25mm metal-fix hex head washer flange, EPDM seal	
For side cladding onto metal	

Timber applications	
#10 x 45mm timber-fix wafer head square drive	
For concealed fix onto timber (Saflok 700®, Saflok 410® and Newlok™)	
#12 x 85mm timber-fix hex head washer flange, EPDM seal	
For trapezoidal onto timber (Tufdek® IBR, Widedek®, Fluteline® and Trimflute®)	
#12 x 65mm timber-fix hex head washer flange, EPDM seal	
For pierced fix onto timber (Classicorr® corrugated)	

All the above Fixtite™ fasteners are Class 4.

