

# **FastLock**<sup>®</sup> suspended ceiling grid







Stronger, more durable



#### CONTENTS

- 3: The FasTLock Advantage
- 4: FasTLock 24 product detail
- 5: FasTLock 15 product detail
- 6: Specification and technical information
- 7: Contact details

# **Building Codes and Applicable Standards**

Ecoplus Systems suspended ceiling grid is appraised by BEAL (Building Element Assessment Laboratory) as a system meeting the applicable Australian and New Zealand standards for suspended ceiling systems. The following codes and standards are referred to within this manual and or the BEAL Appraisal Certificate for compliance with the respective building codes of Australia and New Zealand;

AS/NZS 2785:2000	Suspended Ceilings – Design and Installation.
NZS 4219:1983	Specification of Seismic Resistance of Engineering Systems in Buildings.
AS/NZS 1170:2002	Structural design actions
AS/NZS 1170.5	Seismic compliance
AS 1791:1986	Chromate conversion coatings
AS 2946:1991	Suspended Ceilings, recessed luminaries and air diffusers
AS 4600:1996	Cold form steel structure code
AS 4680:2006	Hot-dipped galvanised (zinc) coatings on fabricated ferrous materials.
AS/NZS 1397:2001	Steel sheet and strip –Hot dipped zinc coated or aluminium /zinc coated.
AS/NZS 1530.3:1999	Methods for fire testing
AS/NZS 3101:2006	Concrete Structures Standard
AS/NZS 4534:2006	Zinc and zinc/aluminium alloy coatings in steel wire
NZS 3602:2003	Timber and wood-based products for use in building.
NZS 3603:1993	Timber structures standard
NZS 3604:1999	Timber framed Buildings

New Zealand Building Code Handbook and Approved Documents, Building Industry Authority, 1992 up to, and including October 2004 amendment

NZBC – B2 Durability **FastLock 24** and **FastLock 15** will have a minimum serviceable life of 15 years when installed in a dry, non corrosive, interior installation



### **Technical Information**

In addition to the information provided in this manual, further technical information can be found in the BEAL (Building Element Assessment Laboratory) Appraisal certificate which is available by visiting www.ecoplus-systems.com

2



# THE FasTLock ADVANTAGE

Stronger, more durable

FasTLock Suspended Ceiling Grid by Ecoplus Systems is an innovative range of ceiling grid components engineered to provide a stronger more durable suspended ceiling system. FasTLock is designed to accommodate a wide variety of Ecoplus ceiling tile solutions including mineral and glass fibre, wood and plasterboard.

#### One piece integrated connection flukes

FasTLock Suspended Ceiling Grid features integrated connection flukes on all main runner and cross tee components. The connection flukes are an integral part of the component itself. This important feature provides a high level of connection strength and shear load capability creating a stronger more durable grid system, particularly when subjected to abnormal stress or loading.

During manufacture, the connection tabs on all main runner and cross tee components are pressed as part of the component itself. Integrated connection flukes eliminate a potential weak point found in systems with stab connectors which are formed from a separate piece of steel and then riveted or fusion welded onto the components body.

Tested and appraised to New Zealand and Australian building standards, FasTLock Suspended Ceiling Grid will provide your building project with a high quality, versatile and performance tested suspended ceiling system.

#### **Design options**

FasTLock Suspended Ceiling Grid is available in two standard widths.

FasTLock 24mm for general applications FasTLock 15mm a minimalist option providing a less dominant appearance

### Colours

FasTLock Suspended Ceiling Grid is stocked in white as standard. Black is available on an indent basis. Custom colours are also available subject to minimum production runs





#### Material

FasTLock Suspended Ceiling Grid is manufactured from double web hot dipped galvanised steel pre finished with a hard wearing polyester paint finish.

- Dimensionally stable
- Long term performance

## **Environmental Sustainability**

- **FasTLock** is modular, can be disassembled, relocated and reused.
- **FasTLock** components can be fully recycled at the end of life.
- **FasTLock** packaging is recyclable.



# FasTLock 24

Stronger, more durable

**FasTlock 24** is a general purpose 24mm exposed ceiling grid suitable for square edge and tegular edge ceiling tiles.



38 Item Number Dimension length (mm) height (mm) width (mm) Gauge mm Content/Carton Pieces Carton Weight Kg's   TW2110 3600 38 24 0.35 25 90 32	<b>▲</b>	FasTLock 24mm Main Runner							
TW2110 3600 38 24 0.35 25 90 32	38	Item Number	Dimension length (mm) height (mm) width (mm)			Gauge mm	Conte Pieces	nt/Carton Lineal mtrs	Carton Weight <sub>Kg's</sub>
	<u>↓</u> <u>↓</u> ↓	TW2110	3600	38	24	0.35	25	90	32



38

FasTLock 24mm 1200mm Cross Tee								
Item Number	length (mm)	Dimension height (mm)	width (mm)	Gauge mm	Conte Pieces	ent/Carton Lineal mtrs	Carton Weight <sub>Kg's</sub>	
TW2120	1200	38	24	0.35	50	60	20	

]	FasTLock 24mm 600mm Cross Tee									
	Item Number	length (mm)	Dimension height (mm)	width (mm)	Gauge mm	Conte Pieces	nt/Carton Lineal mtrs	Carton Weight <sub>Kg's</sub>		
	TW2130	600	38	24	0.35	75	45	13.5		



Perimeter Trim 24mm								
Item Number	length (mm)	Dimension height (mm)	width (mm)	Gauge mm	Conte Pieces	ent/Carton Lineal mtrs	Carton Weight <sub>Kg's</sub>	
TW2140	3000	24	24	0.5	40	120	21	

# SYSTEM APPLICATION

**NOTE:** Fixings used for direct hanging with wire are determined by building material above ceiling system (eg: concrete, timber or steel).





# FasTLock 15

Stronger, more durable

**FasTlock 15** is a narrow profile 15mm exposed ceiling grid providing a refined appearance suitable for tegular edge ceiling tiles.



	FasTLock 15	FLock 15mm Main Runner								
38	Item Number Dimension length (mm) height (mm) width (mm)				Gauge mm	Conte Pieces	nt/Carton Lineal mtrs	Carton Weight <sub>Kg's</sub>		
	TWN310	3600	38	15	0.35	25	90	29		



FasTLock 15mm 1200mm Cross Tee									
Item Number	length (mm)	Dimension height (mm)	width (mm)	Gauge mm	Conte Pieces	ent/Carton Lineal mtrs	Carton Weight <sub>Kg's</sub>		
TWN320	1200	38	15	0.35	50	60	18		

]	FasTLock 15	<b>mm</b> 600m	nm Cross					
	Item Number	length (mm)	Dimension height (mm)	width (mm)	Gauge mm	Conte Pieces	nt/Carton Lineal mtrs	Carton Weight <sub>Kg's</sub>
	TWN330	600	38	15	0.35	75	45	12



	Perimeter Trir	m 24mm						
/	Item Number	length (mm)	Dimension height (mm)	width (mm)	Gauge mm	Conte Pieces	nt/Carton Lineal mtrs	Carton Weight <sub>Kg's</sub>
	TW2140	3000	24	24	0.5	40	120	21

# SYSTEM APPLICATION

**NOTE:** Fixings used for direct hanging with wire are determined by building material above ceiling system (eg: concrete, timber or steel).





# FastLock SUSPENDED CEILING GRID Stronger, more durable

#### Installation

All ceilings must be designed in accordance with the requirements of AS/NZS 2785-2000. As part of this design process, seismic compliance to AS/NZS 1170.5 is required.

Work shall comply with the installation requirements of AS/NZS 2785:2000 by appropriately qualified trade contractors. Installation should not commence until the building is weather tight. Refer to AS/NZS 2785-2000 4.2

The Main Runner shall be hung with a 2.5mm straightened galvanised tie wire at maximum of 1200mm centres. Cross Tees shall intersect and be positively locked into the Main Runner pre punched web slots. Cross tee alignment is achieved by locating the tees to the left hand side of the web slot on the adjoining section.

Main Runner and Cross Tees spacing shall not exceed the design ceiling load or as may otherwise be required to prevent deflection greater than 1/360 of the span of the Cross Tees or Main Runners.

Perimeter trim should be cut to length and fixed to the wall with suitable fasteners such as wafer head needle tipped screws at maximum of 600mm centres.

# Additional Loads

Additional loads are not to be placed upon or carried by the suspension system. Ecoplus Systems recommend independent support of heavy fixtures is considered for safety purposes.

## Seismic Connection Strength

The FasTLock 24mm Main Runner has been shown to have a load to pull-out (tension) strength in the order of 156 kg's force (1.5N);

The FasTLock 24mm Cross Tee has been shown to have a load to pull-out (shear) strength in the order of 143kg's force (1.4N)

### Handling and Storage

The proper safe handling and storage of all materials supplied by ECOPLUS Systems Ltd are the responsibility of the ceiling installer/contractor (competent and experienced in the installation of suspended ceiling systems). Dry storage must be provided on site for all the ECOPLUS System components. All components must be stored on a flat dry surface and protected from scratches or physical damage of any kind by/to other trades. Handling of the ECOPLUS FasTLock Suspended Ceiling Grid System's Components requires care and should be handled in a manner that will prevent distortion or physical damage. All accessories must be kept dry.

Module	Installatior	n Method	Approximate quanties required per 100m2 (waste allowance not included)					
Panel Size	Main Runner Centres	Hanger Centres	Main Runner	1200mm Cross Tee	600mm Cross Tee	Hanger		
1200mm x 600mm	1200mm	1200mm	23 139			70		
139 pieces	600mm	600mm 1200mm			139	140		
600mm x	1200mm	1200mm	23	139	139	70		
278 pieces	600mm	600mm 1200mm			278	140		

# **Quantity Guidelines**

This chart provides an approximate quantity for guidelines only. Perimeter trim will vary dependant on room geometry





#### СОΝТАСТ

sales@ecoplus-systems.com

ecoplus-systems.com

PO Box 105577 Auckland City Auckland 1143