Inspired
solutions.

SEISMIC
Kwikloc

The ultimate seismic solution.

Studform
INSPIRED SOLUTIONS

ENVIRONMENTAL CHOICE AUSTRALIA

STU-2011
GECA 28-2010 v2
Furniture and Fittings

Function.
Large open ceiling cavity areas up to 81m^2

Strength.
Ultimate strength to 3G with 100% vertical uplift

Design.
Maintained flat even plane throughout grid system for accurate, gap free tile nesting

Reliable.
Minimised additional suspension for point loads

Unique.
Distinctive studform kwikloc seismic ceiling systems offer unique advantages to the building industry

Realistic.
Our lead-times are realistic, and promises are kept

Easy.
Installation of systems are hassle free

Preferred.
Studform – your preferred system supplier

The ultimate seismic solution.

ENVIRONMENTAL CHOICE AUSTRALIA LICENCE

Good Environmental Choice Australia Limited (GECA) manages a Type 1 Ecolabel program in accordance to ISO 14024 "Environmental Labels and Declarations"and is the owner of the Environmental Choice Australia Ecolabel.

A licence for the use of the Ecolabel is granted to a product where it has been verified by an independent conformity assessment body that the product meets the environmental performance criteria of a GECA standard.

Licence Number: STU-2011

Certification Date : 10th May 2011

Issued to: Studform Pty Ltd

Certified Products:
Corporate Series Aluminium Partitioning Systems
Commercial Doors
Fire Rated Doors
Kwikloc Access Panels (including Fire Rated Access Panels)
Kwikloc Aluminium Ceiling Systems
Imaj Washroom Cubicles

GECA Standard:
GECA 28-2010 Furniture and Fittings (GBCA recognised Level A)

Address of manufacturing site:
4 Scott Court
Mount Gambier SA 5290

Conformity Assessment Body: Environmental Assurance Pty Ltd

Re-certification date: 10th May 2014

Judy Hollingworth
Chief Executive Officer
Good Environmental Choice Australia Limited

Good Environmental Choice Australia

"A commitment to credible product information for sustainable development"

A good choice for the environment.

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Licence Number:
STU-2011

Certification Date:
10th May 2011

Issued to:
Studform Pty Ltd

Certified Products:
- Korporate series aluminium partitioning systems
- Kwikloc Aluminium ceiling systems
- Access panels (including fire rated access panels)
- Imaj washroom cubicles
- Commercial doors
- Fire rated doors

GECA Standard:
GECA 28-2010 Furniture and Fittings (GBCA recognised Level A)

Address of manufacturing site:
Cnr South Road & Manton Street
Hindmarsh SA 5007

Conformity Assessment Body:
Environmental Assurance Pty Ltd

Certifier:
Judy Hollingworth
Chief Executive Officer
Good Environmental Choice
Australia Limited

STU-2011
GECA 28-2010 v2
Furniture and Fittings

SEISMIC
Kwikloc

Kwikloc Seismic Ceiling Systems

Kwikloc seismic ceiling systems

The Kwikloc Seismic ceiling system hosts unique advantages in ultimate seismic ceiling design. The wall bracket system facilitates fixing one side and floating on the opposite side of both plane directions in a ceiling installation. Through the use of a patented two part wall angle system and sliding bracket assembly, the system provides the unique feature of the maintenance of a flat, even plane for accurate tile nesting throughout the entire installation. This is particularly important in health projects, ie hospitals, medical centres, laboratories etc, where hygiene standards are of high importance.

The Kwikloc Seismic ceiling system brings to the industry new levels of seismic ceiling performance, having sustained up to 3G tested forces with 100% vertical uplift. This represents 25–30% increased performance when compared to other ceiling systems available on the market today.

As a representative of the testing facility in New York state, USA commented, “this system was tested to the limits of our equipment and the only way we could see the ceiling failing is if it was on top of the St Andrews fault in California with the largest earthquake that could ever occur.” And further, from the engineering reporter / photographer “this is a very good system. Best we’ve seen. Normally systems fail at 2.0 to 2.25” (it should be noted that standard testing requirements include 67% vertical uplift).

Another major feature / breakthrough represented in the Kwikloc Seismic system is significantly lessened three or five way strutting requirements. Extrapolated engineering reports confirm that areas up to 81m^2 free of bracing requirements are appropriate. This greatly alleviates congestion in ceiling cavity areas, effectively maintaining adequate space for important building function services, ie mechanical ventilation, electrical, plumbing and other important services particularly with respect to health facilities.

strength • hygiene • performance

Aluminium seismic ceiling systems

The Kwikloc system has brought new levels to the market in seismic design with the ability to cope with 3G forces and 100% vertical uplift. Fully tested at world renown facilities.

Team of International Engineers as our support team

Studform sought out the best experts in their fields to take our testing very seriously. Our experts included well recognised engineers in the field from Australia and the US.

Shake table testing comments from the experts

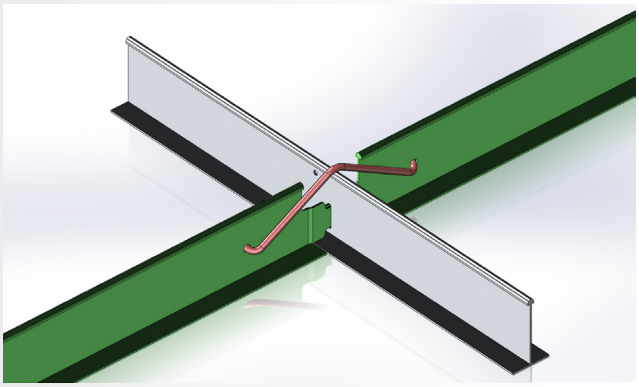
Comment by seismic expert, professor and chair in department of civil structural and environmental engineering team:

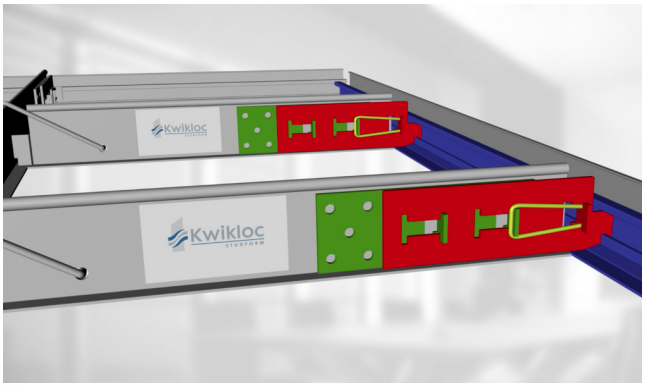
"the ceiling was tested to the limits of our equipment..."

Project Support

Studform can offer full support for your project including Shop drawings, Specific Design, Engineering and Site visits as required.

Seismic ceiling grid





Aluminium Seismic Ceiling Grid, hosting unique features and exceptional advantages.

The seismic clip shown in the figure above represents a quick, cost effective solution and hence alleviating significant bracing requirements throughout the ceiling system. It is very quick to install, with a simple snap-in function.

The engineered locking systems provide positive joining of main Tees and Cross Tees, with installer ease, without the need of any additional operations eg. pop riveting, twisting etc. fig. 1 resulting in a smooth flat joint and thus eliminating the ghosting effect between the ceiling tile and grid.

Unique dual acting wall angle design

With the Kwikloc Seismic two part wall angle and the floating bracket assembly, this system effectively maintains a flat, even plane for accurate tile nesting without gapping. The retractable bracket facilitates movement away from wall edges, while the two part angle facilitates compression in the opposite direction.

Premium Non-Corrosive Finish

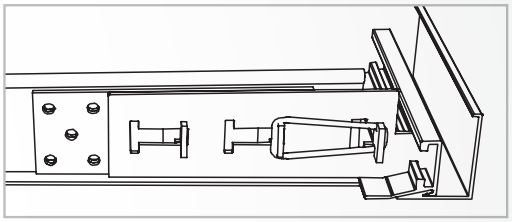
All aluminium sections are powdercoated white on an automatic line resulting in a consistent non-corrosive finish, particularly suited to buildings where quality and longevity is a priority. Other finishes are available with a small surcharge.

Press Stamped Identification

Enables future extensions to projects to proceed in a consistent and orderly manner.

Packaged for ease of transport and storage.

Reduced construction time and therefore cost.



Australian Standard© AS1170.4

Australian Earthquake Loading Standard

Ease of Handling

Components are professionally packaged for ease of handling and safe-guarding the product from damage both in transport and on site.

Reduced Project Management

Installation time is significantly less than other aluminium systems, due to the snap fit locking system. This allows for condensing of schedules and significantly reducing administration and labour costs.

Exceeds Standard Requirements

Suspension points exceed the requirements of AS/NZS 2785.

Precision manufacturing procedures also maintain uncompromising accuracy to ensure straight grid lines.

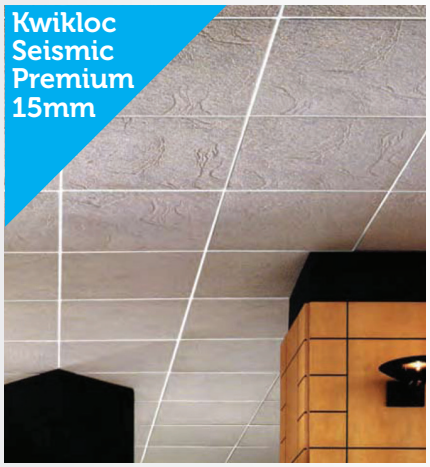
Bulkhead / Grid to Plaster Construction Ease

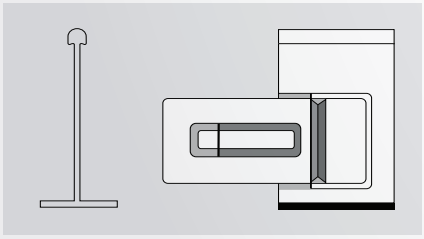
The Kwikloc System incorporates an aluminium Bulkhead section which facilitates the use of quick connection brackets, thus increasing rigidity and providing ease of installation. Also available with the system is a quick connection grid to plaster junction tee, again incorporating quick connection brackets to provide a fully complemented system.

Seismic Requirements

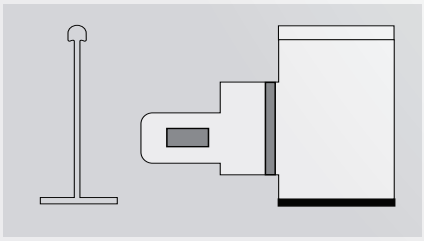
The Kwikloc aluminium ceiling grid systems have the structural capacity to meet the loading requirements of both AS 1170.4 and NZS 4203 with respect to the horizontal and vertical earthquake forces as required by both Australian & New Zealand standards. Specific design requirement standards for the Kwikloc System are available for the various areas and activity levels throughout Australia and New Zealand.

Typical application details

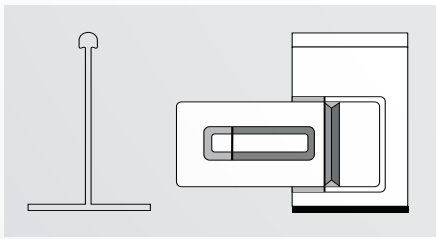




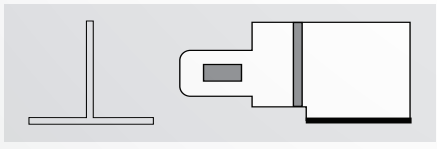
KL 3600P Main Tee



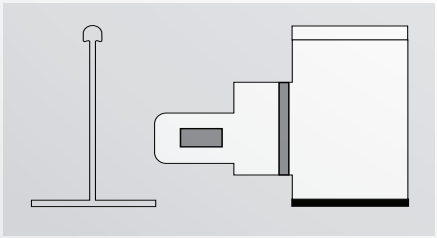
KL 600P/KL 1200P Cross Tee



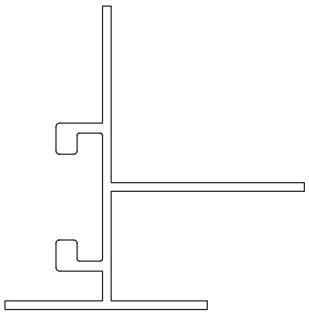
KL 3600 Main Tee



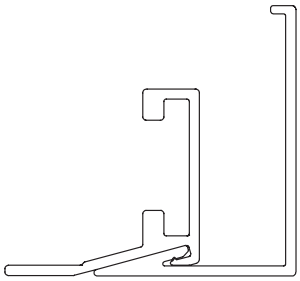
KL 600 Cross Tee



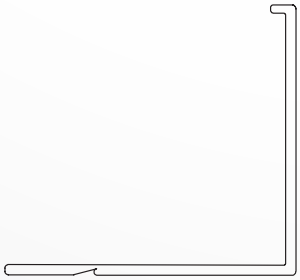
KL 1200 Cross Tee



KLPLSEI3600
Plaster to grid seismic junction tee



ASTSA/B3600
Kwikloc standard seismic two part floating wall angle



ASTS3600
Kwikloc standard seismic fixed side wall angle

Architectural specifications

Suspended Ceilings
Kwikloc Seismic Regal/
Premium/Corporate Systems

General

Provide a Kwikloc Seismic aluminium exposed grid system as manufactured by Studform.

Material

The exposed aluminium grid shall be Kwikloc (specify either Premium 15mm, Regal 24mm or Corporate 32mm) powdercoated (satin white) as manufactured by Studform. The Kwikloc grid shall consist of high grade aluminium powdercoated (specify satin white or other).

All materials shall meet the requirements of AS 2785 - Suspended Ceilings Design and Installation.

Installation

The main tees (KL 3600 / KL3600P / KLTH 3600) shall be spaced at 600mm or 1200mm centres supported from the structure by either a 2.5mm or a 4mm soft galvanised rod at 1200mm max. centres and no more than 600mm from the perimeter trim and no more than 300mm from any main tee join. The cross tees shall be positively locked together through the main tee slots to form the required module and seismic clip part KLSEI75 – inserted to complete the seismic connection. All 1200mm cross tees shall be centre punched at 600mm to facilitate light fittings and/or mechanical services and any alterations thereof.

In General:

Hangers, main tees and spacer tees shall be spaced so as not to exceed the designed ceiling load or as may otherwise be required to prevent deflection in excess of 1/360 of the span of the main tee or spacer. Extra hangers are to be provided for light fittings, mechanical services etc, that are supported by the grid system where point load system designs are exceeded.

Three way bracing struts shall be used in accordance with specific seismic site design, or in general, to a maximum of 81m^2.

Down bracing shall be incorporated in external installations and areas adjacent to openings prone to uplift caused by external wind forces. Hold down clips shall be used in braced areas or as required.

Grid Module

The grid module shall be (600 x 600) (1200 x 600) (1200 x 300) or other...

Perimeter Detail

Perimeter trim shall be ASTSA/B3600 Kwikloc standard seismic two part floating wall angle securely fixed to two adjacent sides of each open ceiling area. Wall trim ASTS3600 Kwikloc standard seismic fixed side wall angle shall be securely fixed to the opposing adjacent sides of above mentioned open ceiling areas in each instance. Main tees and spacers shall be fixed on to the floating wall angle with the Kwikloc seismic wall angle bracket KLSEI150 at every point with 2 x 5/32 aluminium rivets. Main tees and spacers shall be fixed to the alternate room side, to the ASTS3600 Kwikloc standard seismic fixed side wall angle via the A90 bracket with 2 x 5/32 aluminium rivets to grid and 2 x 8 gauge screws to wall surface / structure.

Bulkhead / Grid to Plaster Detail

Kwikloc Bulkhead section KLBHS4000 to be used in conjunction with KLSEI150 single part Kwikloc brackets as required for bulkhead junctions to avoid exposed fixings.

KLPLSEI3600 plaster to grid seismic junction tee to be used at solid plaster ceilings to grid ceiling junctions. The KLSEI150 single part Kwikloc bracket, again to be used to facilitate this connection.

SEISMIC
Kwikloc

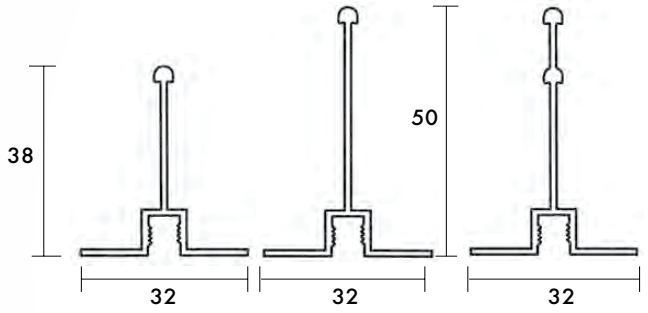
Aluminium ceiling grid

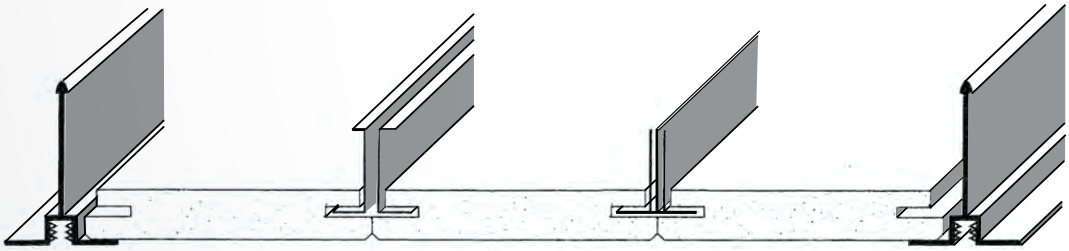
Corporate seismic ceiling system

Comprehensive section variety for varied applications and grid modules

Modules available in:

- 1200 x 1200
- 1350 x 1350
- 1500 x 1500





INTERMEDIATE C OR T SPLINES FOR PANEL SUPPORT

Corporate Ceiling System

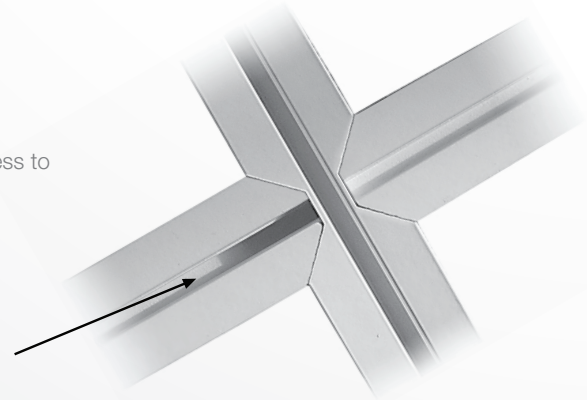
Applications:

- Up-market office developments
- Longevity of ceiling life

Mitred Top Hat Grid

Developer's Favourite

- Provides flexibility
- Ease of maintenance and access to services
- Corporate image
- Enables partition relocation without repair
- Fluted s/line channel for partition fixing
- Manufactured to Australian Standards
- Powdercoated on automatic line in low sheen white for optimum finish



Developer's Favourite

The ultimate seismic solution.

AVERT CATASTROPHIC COLLAPSE

SEISMIC Kwikloc

Studform INSPIRED SOLUTIONS

Bringing a great ceiling together isn't just what we do – it's what we do best.

Studform brochures also available:

- Premium ceiling tiles
- Korporate aluminium partition suite
- Acoulite high performance acoustic doors
- Satellite commercial doors
- Entrex industrial PA doors
- Kingdom premium residential doors

Studform
INSPIRED SOLUTIONS

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www.studform.com.au