Concrete

Yeti-Anchor™ Design Guidelines

Yeti Anchors link Sandwich Panel layers, transferring forces to the structure, while allowing movement and reducing heat transfer for insulation.

Contents

2.14

Website
www.cfsgroupltd.com

01491 576466
sales@cfsgroupltd.com

CFS

About Us

Clarity in Design, Confidence in Construction

Engineers, architects, and contractors trust CFS to deliver their projects. From residential to large infrastructure, we mitigate risk and you build with confidence, with our industry-leading products and AI-driven design software.

Our Mission

To accelerate the delivery of buildings and infrastructure.

Our Certifications

bsi ISO 9001 Quality Management Systems CERTIFIED

bsi ISO 14001 Environmental Management CERTIFIED

Our Companies

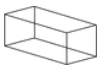
CFS

Market leading products for residential and commercial sectors.

Clariti

A collaborative AI teammate built to help ambitious design teams achieve more.

Our Expertise



Masonry

- AMS Masonry Support
- Prolock™ Brick-Slip Soffits and Lintels
- Wall Ties & Restraints
- Lintels
- Windposts

Concrete

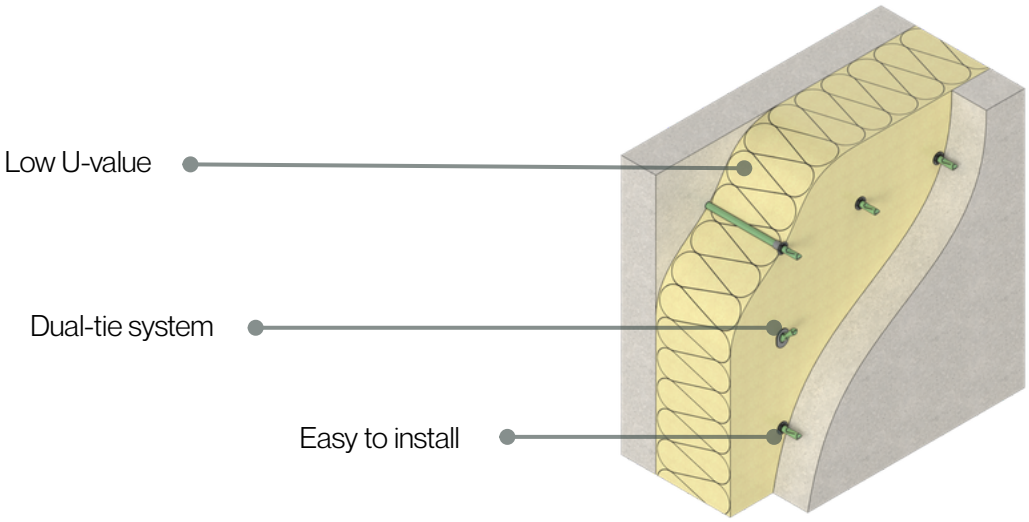
- Colossus™ Panel Hanger
- Column and Wall Shoes
- Yeti™ Sandwich Panel Connectors
- Lifting and Fixing Systems
- Cast-in Channel and T-bolts
- Ski Channels

CFS

Features

Yeti Sandwich Panel Anchors Features

The Yeti-Anchor is a durable, insulating connector for precast and tilt-up insulated concrete panels. Made from glass-fiber reinforced polymer, it replaces metal connectors to eliminate thermal bridging, enhancing energy efficiency and preventing condensation, mold, and corrosion in buildings.



Features

Low U-value

Sophisticated glass fibre reinforced polymer material with advanced thermal properties.

Dual-tie System

Reduces the number of anchors required.

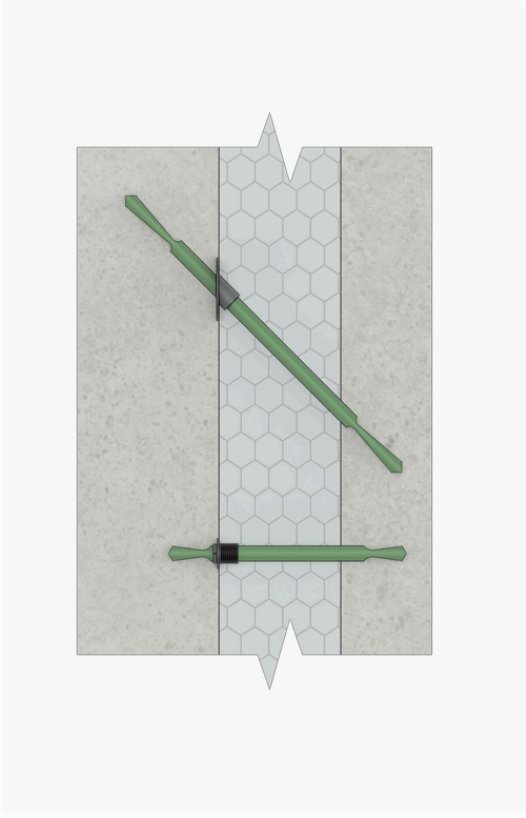
Easy to Install

Two installation options make the process straightforward.

CFS

Calculation Criteria

Design Parameters



Concrete Strength

- At demoulding: Calculated at C12/15 (default), C16/20 (available on request)
- After 28 days: Calculated at C35/45

NB: Please note that CFS will need to be consulted if there is any deviation from the assumed demoulding cube strength.

Load Cases

- Demoulding and lift from horizontal position from oiled formwork to vertical
- Lifting panel vertically using stationary, mobile or rail-mounted crane
- Wind pressure and suction
- Self-weight support of the external layer

NB: Please note that design requirements may vary and CFS requests that you supply calculations for checks.

Assumptions

- Mould adhesion (q_adh) for oiled steel forms, Load Case 1: –1.0 kN/m^2
- Dynamic factor (ψ dyn) for Load Case 2: 1.3
- Wind pressure/tension (q_kw), Load Case 3: –1.50 kN/m^2

NB: Please note that design requirements may vary and CFS requests that you supply calculations for checks

Setting Out Parameters

YETI	MIN C/C	MAX C/C
50-H-8	200	850
50-H-15	200	850
50-D-8	200	No max*
70-D-15	200	No max*

Design Notes:
- *Diagonals can be few in number so no maximum spacing exists

Website www.cfsgroupltd.com
01491 576466 sales@cfsgroupltd.com

CFS

Pull-out Test Data

YETI-8-50-H

Concrete Strength	Capacity	Parameters
Tension (short-term with C12/15 concrete)	3.7 kN	EN Design Resistance
Tension (short-term with C16/20 concrete)	4.4 kN	EN Design Resistance
Tension (long-term with C35/45 concrete)	3.9 kN	ASTM E488 - safety factor of 4 applied to test results
Shear (long-term with C16/20 concrete)	1.0 kN	ASTM E488 - safety factor of 4 applied to test results

YETI-15-50-H

Concrete Strength	Capacity	Parameters
Tension (short-term with C12/15 concrete)	5.56 kN	EN Design Resistance
Tension (short-term with C16/20 concrete)	5.56 kN	EN Design Resistance
Tension (long-term with C35/45 concrete)	3.88 kN	ASTM E488 - safety factor of 4 applied to test results
Shear (long-term with C12/15 concrete)	2.75 kN	ASTM E488 - safety factor of 4 applied to test results

YETI-15-50-D

Concrete Strength	Capacity	Parameters
Tension (short-term with C12/15 concrete)	6.49 kN	EN Design Resistance
Tension (short-term with C16/20 concrete)	8.25 kN	EN Design Resistance
Tension (long-term with C35/45 concrete)	4.5 kN	ASTM E488 - safety factor of 4 applied to test results

YETI-15-70-D

Concrete Strength	Capacity	Parameters
Tension (short-term with C12/15 concrete)	8.0 kN	EN Design Resistance
Tension (short-term with C16/20 concrete)	9.3 kN	EN Design Resistance
Tension (long-term with C35/45 concrete)	6.63 kN	ASTM E488 - safety factor of 4 applied to test results

Thank You

Contact us today for a quote or if you have any questions

Location
CFS Unit 14-16
Westfield Estate
Henley Road
Medmenham
SL7 2TA

Version
1.0