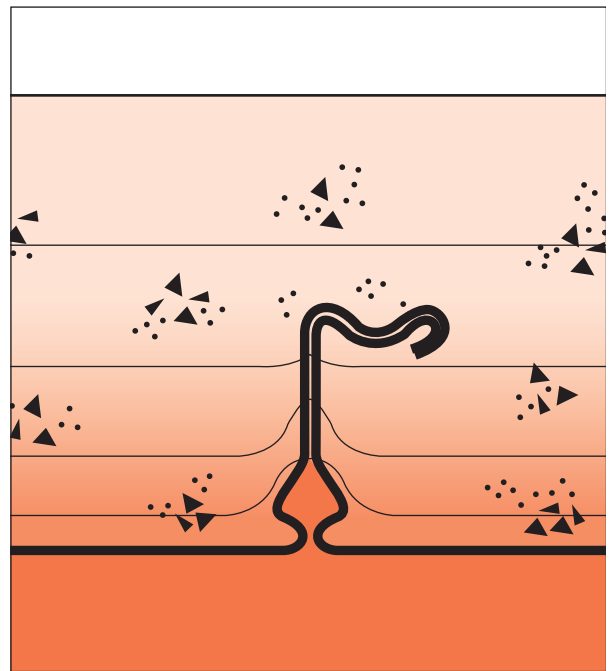


# STRAMIT CONDECK HP<sup>®</sup> COMPOSITE SLAB FIRE DESIGN

Supplement to Stramit Condeck HP<sup>®</sup> Structural Steel Deck - Technical Design Manual

- ✓ Cost savings in fire-rated slab design
- ✓ Optimised composite slab reinforcement using moment re-distribution
- ✓ Utilises the top flanges of Stramit Condeck HP<sup>®</sup> deck's unique enclosed rib
- ✓ Calibrated for Fire Resistance Periods of up to 2 hours
- ✓ Stramit Condeck HP<sup>®</sup> design procedure independently verified by BRANZ and CSIRO
- ✓ Accuracy confirmed by full-scale and pilot fire tests



## Reduction in FER mesh used in fire design

slab fire design method	FRP (mins)	Stramit Condeck HP <sup>™</sup> metal deck thickness (mm)		
		0.75	0.90	1.00
	60	273	320	351
to Australian Standards	90	230	268	292
	120	209	242	262

Note: The limiting tensile strain in the top flanges is assumed to be 1.5%.

## Procedure

1. Carry out regular slab design for fire using pages 39 to 42 of the Stramit Condeck HP<sup>®</sup> Structural Steel Deck - Technical Design Manual (Issue Apr 09).
2. Reduce positive FER (Fire Emergency Reinforcement) steel by the amount shown in the table. Note that standard shrinkage and temperature mesh may still be required. This is generally placed directly on to the ribs for thin slabs, but must be near the top face for thicker slabs.

## IMPORTANT NOTICE AND DISCLAIMER

The information contained within this brochure is intended for general use and information only. Before application in a particular situation, Stramit recommends that you obtain appropriate independent qualified expert advice confirming the suitability of product(s) and information in question for the application proposed. While Stramit accepts its legal obligations, be aware however that to the extent permitted by law, Stramit disclaims all liability (including liability for negligence) for all loss and damage resulting from the direct or indirect use, or reliance on, the information provided in this brochure.

© Registered trademarks of Stramit Corporation Pty Limited. ABN 57 005 010 195 trading as Stramit Building Products.  
A member of the Fletcher Building Group  
© Stramit Corporation Pty Limited, March 2012.

This document replaces all previous issues. Please destroy, or clearly mark as superseded, all previous issues.