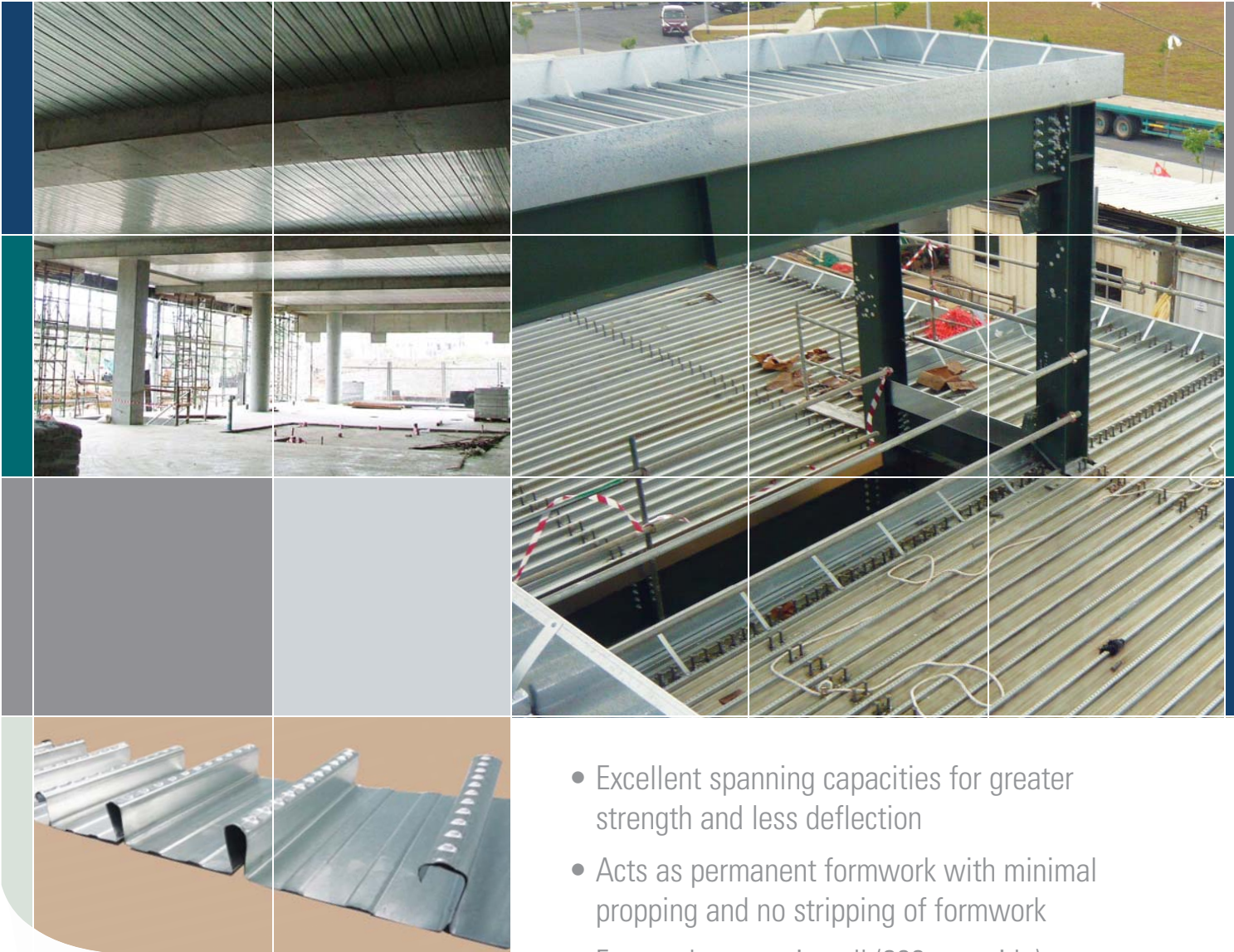




# LYSAGHT<sup>®</sup> BONDEK<sup>®</sup> II

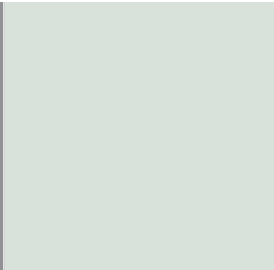
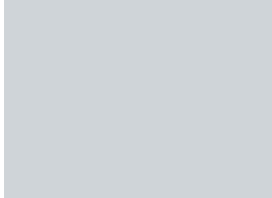
User's Guide for  
composite concrete  
slab construction to  
Eurocodes



- Excellent spanning capacities for greater strength and less deflection
- Acts as permanent formwork with minimal propping and no stripping of formwork
- Fast and easy to install (600mm wide)
- Works as composite slab saving on concrete and reinforcement costs







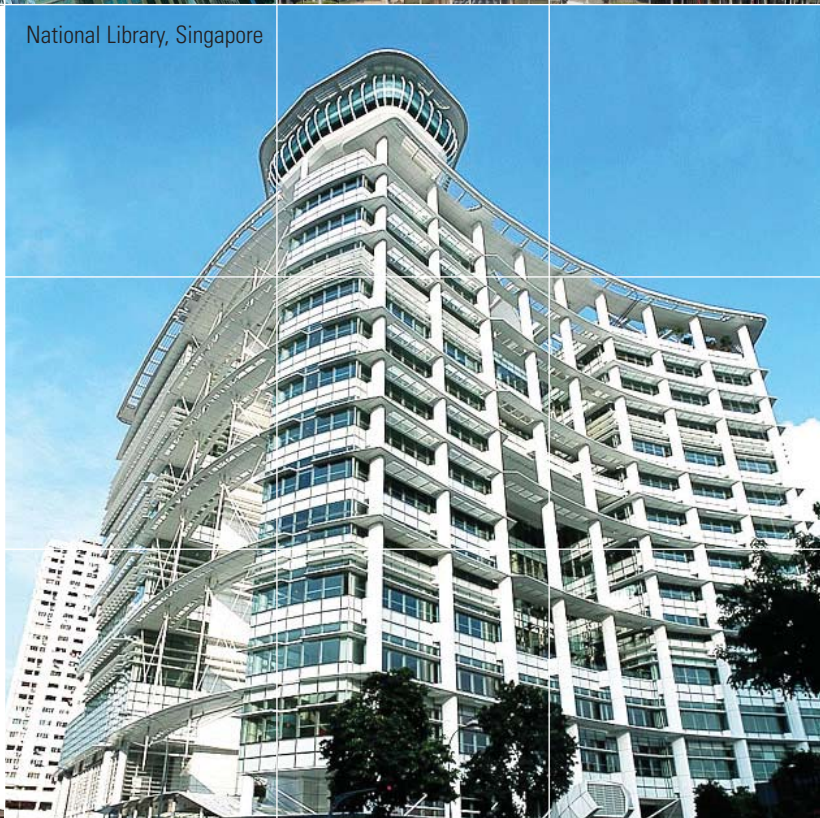
Parkview Square, Singapore



Right - Caltex Tower, Singapore  
Left - Republic Plaza, Singapore



One Raffles Quay, Singapore



National Library, Singapore

## Product Descriptions

All descriptions, specifications, illustrations, drawings, data, dimensions and weights contained in this catalogue, all technical literature and websites containing information from BlueScope Lysaght are approximations only.

They are intended by BlueScope Lysaght to be a general description for information and identification purposes and do not create a sale by description. BlueScope Lysaght reserves the right at any time to:

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## Preface

BlueScope Lysaght presents this new publication on LYSAGHT® BONDEK® II. We upgraded this document and design and construction information for the latest Eurocodes and related Singapore Standards.

- SS EN 1990:2008
- SS EN 1991-1-1:2008
- SS EN 1991-1-2:2008
- SS EN 1991-1-6:2009
- SS EN 1992-1-1:2008
- SS EN 1992-1-2:2008
- SS EN 1993-1-3:2010
- SS EN 1994-1-1:2009
- SS EN 1994-1-2:2009
- SS 560:2010
- SS 561:2010

Our newest release of supporting software and the Design and Construction Manual for BONDEK® II structural steel decking incorporates BlueScope Lysaght's latest research and development work. Improved design and testing methods have again pushed BONDEK® II structural steel decking to the forefront. New formwork tables are optimised for steel frame construction but are also suitable for concrete frame construction and masonry walls.

## Conditions of use

This publication contains technical information on the following base metal thicknesses (BMT) of LYSAGHT® BONDEK® II:

- LYSAGHT® BONDEK® II 0.75mm thickness
- LYSAGHT® BONDEK® II 1.0mm thickness
- LYSAGHT® BONDEK® II 1.2mm thickness

## Warning

Design capacities presented in this User's Guide and LYSAGHT® software are based on test results. They shall not be applicable to any similar products that may be substituted for LYSAGHT® BONDEK® II. The researched and tested design capacities only apply for the yield stress and ductility of steel strip manufactured by BlueScope Lysaght to the LYSAGHT® BONDEK® II profile specifications.

For public safety only LYSAGHT® BONDEK® II can be certified to comply with Eurocodes with Singapore National Annexes in accordance with the product application, technical and specification provisions documented in this Design and Construction Manual.

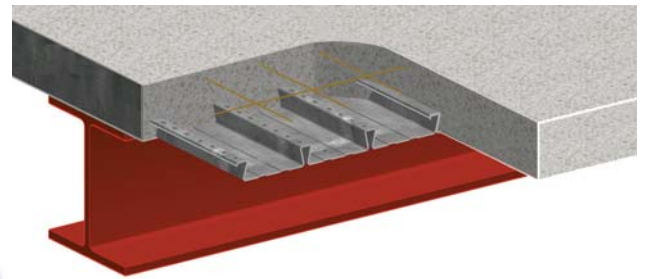
## Technical support

Contact your local BlueScope Lysaght Technical Sales Representative to obtain additional copies the Design and Construction manual and User's Guide for BONDEK® II Design Software. The software can be downloaded by visiting: [www.lysaght.com.sg](http://www.lysaght.com.sg)

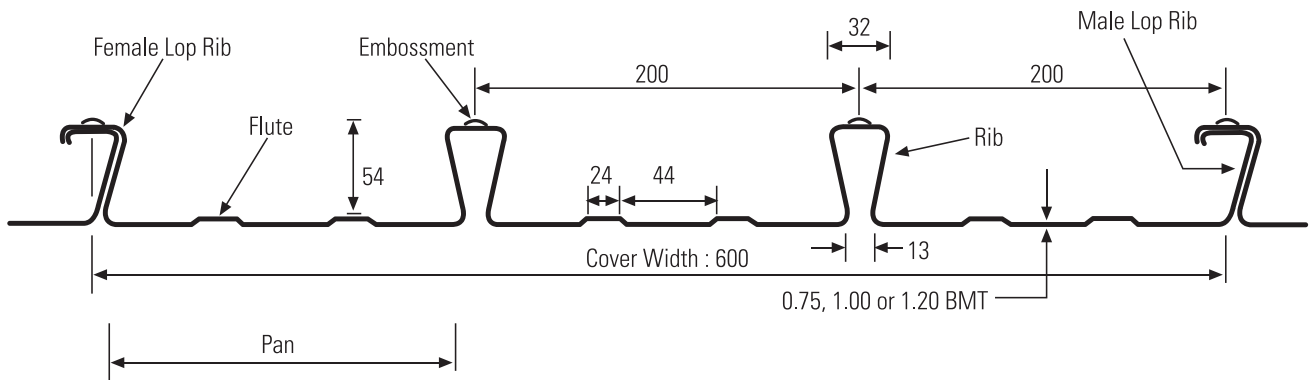


# LYSAGHT® BONDEK® II STRUCTURAL STEEL DECKING SYSTEM

## TYPICAL UNPROPPED SPAN 2.6M - 3.8M



### LYSAGHT® BONDEK® II structural steel profile



LYSAGHT® BONDEK® II profile

**Table 1.1**  
LYSAGHT® BONDEK® II section properties

	Thickness	Yield Strength	Section Modulus Area	Cross-sectional area of BONDEK	Second Moment	Sheeting Elastic Centroid	Mass	Coverage	
	BMT (mm)	MPa	$Z_x 10^3 \text{ mm}^3/\text{m}$	$A_{sh} (\text{mm}^2/\text{m})$	$I_x 10^4 \text{ mm}^4/\text{m}$	$d_{cb} (\text{mm})$	$\text{kg}/\text{m}^2$	$\text{kg}/\text{m}$	$\text{m}^2/\text{t}$
<b>LYSAGHT® BONDEK® II Structural Steel Decking Profile</b>	0.75	550	12.50	1259	47.98	15.3	10.3	6.18	97.13
	1.0	550	16.69	1678	64.08	15.5	13.6	8.14	73.71
	1.2*	500	20.03	2014	76.90	15.5	16.2	9.71	61.79

\*Subject to availability

## Using LYSAGHT® BONDEK® II structural steel deck

LYSAGHT® BONDEK® II structural steel decking is a highly efficient, versatile and robust formwork, reinforcement and ceiling system for concrete slabs. It is a profiled steel sheeting widely accepted by the building and construction industry to offer efficiency and speed of construction. It has re-entrant ribs into the concrete slab at approximate 200mm centres and its depth is 54mm. BONDEK® II profiled steel decking is roll-formed from hot dipped, zinc-coated, hi-tensile steel strip, in base metal thicknesses (BMT) of 0.75, 1.0 & 1.2mm. The steel strip conforms to AS1397 or equivalent in accordance with BC1:2012, grade G550 Z275 for 0.75 and 1.0mm BMTs and G500 Z275 for 1.2mm BMT.

This user guide is to be used in conjunction with the BONDEK® II structural steel decking Design and Construction Manual\* and BONDEK® II Design software - and forms a practical construction handbook for design and installation of BONDEK® II formwork.

Composite slab designs can be adopted from the BONDEK® II structural steel decking Design and Construction Manual, in conjunction with a consulting structural engineer.

Topics in this guide include construction and formwork tables.

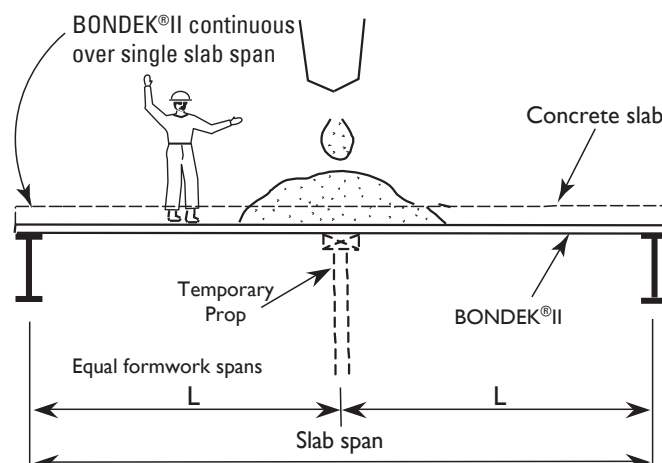
Our newest release of supporting software and the Design and Construction Manual for BONDEK® II structural steel decking complies to Eurocode and Singapore regulations incorporating BlueScope Lysaght's research and development work. Improved design and testing methods have again pushed BONDEK® II structural steel decking to the forefront. New formwork tables are optimised for steel frame construction but are also suitable for concrete frame construction and masonry walls.

Please consult 'Use of formwork tables' when using concrete framed or masonry wall construction and refer to the Design and Construction Manual.

BONDEK® II steel decking permits installation of suspended services and ceilings without drilling into the concrete slab. A reliable interlocking mechanism provides vertical lapping for faster installation. BONDEK® II steel deck has a durable galvanised coating.

### Design Advantages include:

- Excellent spanning capacities for greater strength and less deflection
- Acts as permanent formwork with minimal propping and no stripping of formwork face is required
- Fast and easy to install (600mm wide) with less handling required
- Works as reinforcement with composite slab saving on concrete and reinforcement costs
- Ribs at 200mm centres creating a safe working platform with slip resistant embossments on the ribs
- Advanced Design for Fire Resistance
- New BONDEK® II design software gives added flexibility and ease of design and is in accordance to the latest Eurocodes
- Nationwide technical support
- Developed to the latest Eurocodes

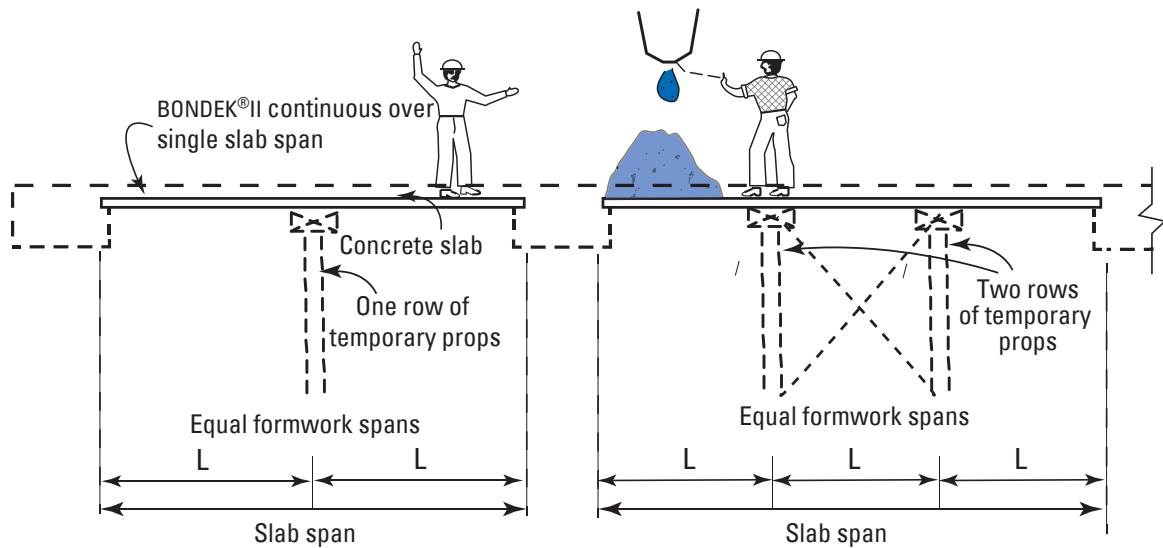


**Figure 1**  
BONDEK® II SHEETS CONTINUOUS OVER SINGLE SLAB SPAN

## USE OF FORMWORK TABLES

The spanning tables presented are based on the following assumptions and constraints. The reader needs to ensure that the particular situation being designed falls within these assumptions and constraints.

1. At a minimum, BONDEK® II shall be secured at every pan at ends of sheets and also at permanent supports. Failure to secure BONDEK® II at supports may lead to excessive deformation and structural failure.
  - Suitable fixing methods should be used such as spot welds, self drilling screws or drive nails.
  - Temporary props are equally spaced within each slab span
  - Ratio of two adjacent slab spans equal 1:1 that is  $L/L = 1$
2. The tables shall be used for normal density concrete ( $26\text{kN/m}^3$ ).
3. The lines of support shall extend across the full width of the sheeting and have a minimum bearing 50mm at the ends of the sheets and 100mm at intermediate supports over which sheeting is continuous, including at props.  
25mm minimum bearing length at the ends of sheets is acceptable in concrete frame construction.
4. The tables are based on the following maximum construction loads:
  - Stacking of material on BONDEK® II sheets before placement of concrete only =  $100\text{kg/m}^2$
  - Mounding of concrete =  $75\text{kg/m}^2$  over an area of 3.0 x 3.0m and zero over the remainder.
  - Construction loads (workmen and equipment) before concrete is placed =  $100\text{kg/m}^2$
  - Construction loads during concrete cast =  $75\text{kg/m}^2$
5. LYSAGHT® BONDEK® II sheets are readily available, custom-cut, in any length from 600mm up to 12,000mm (length tolerance +0, -10mm). Maximum and minimum lengths apply. Please contact your local service centre for details.
6. No loads from stacked materials after pour are allowed until the concrete has set.
7. The sheets shall not be end spliced or jointed.
8. Ponding dead load - the additional concrete due to ponding of the concrete from the sheeting deflection has been included for tables with span/130 deflection limit.
9. Supports shall be effectively rigid and strong to support construction loads.
10. The sheeting shall not have cantilever portions.
11. Wet concrete deflection of BONDEK® II =  $L/180$  or  $L/130$ , where L is the distance between centres of props or permanent supports.
12. The information contained in the publication is intended for guidance only. This information to be used only in conjunction with a consulting structural engineer.
13. Further details can be sought from the BlueScope Lysaght publication BONDEK® II Design & Construction Manual or consulting Singapore Office on (+65) 6264 1577

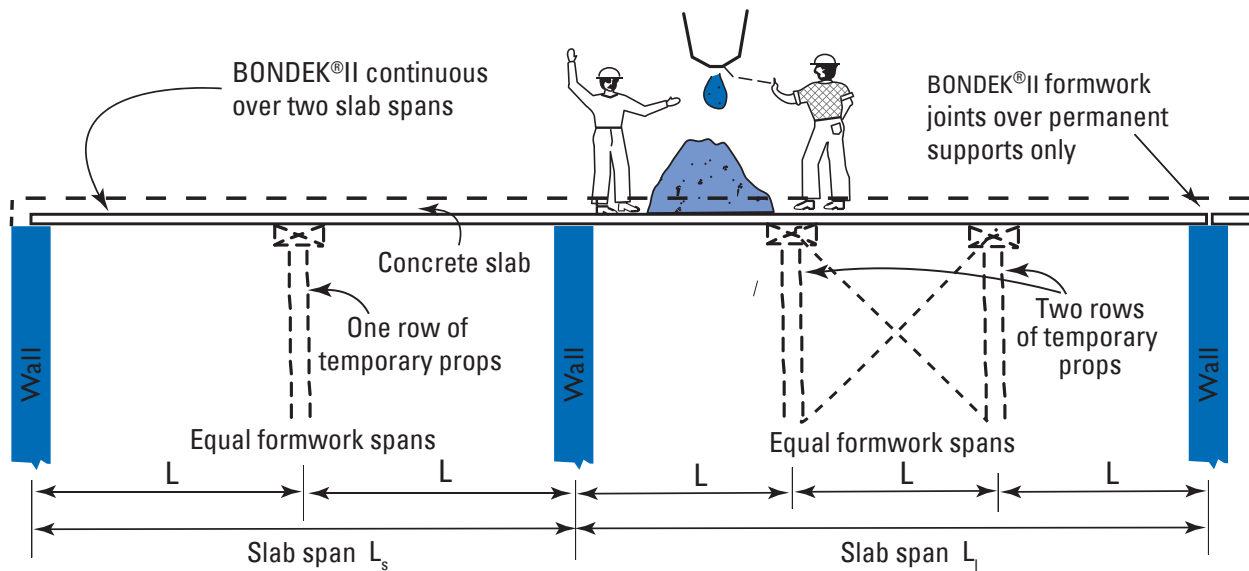


**Figure 2**

Concrete frame construction

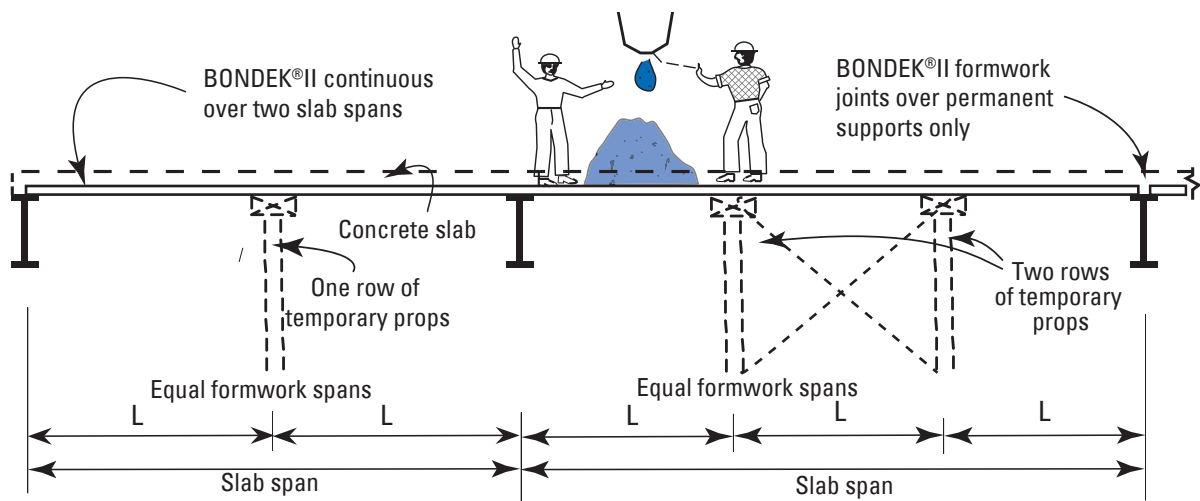
BONDEK® II sheet continuous over single slab span.

Refer to BONDEK® II formwork/ slab span tables for single slab span only.



**Figure 3a**

BONDEK® II sheet continuous over masonry support



**Figure 3b**

BONDEK® II sheet continuous over steel support

**NOTE (For Figure 3a & 3b):** BONDEK® II sheet continuous over 2 slab spans.

Legend :  $L_l$  = Long span  $L_s$  = short span

The formwork tables in this manual are based on equal spans ( $L_l = L_s$ ). For unequal spans, refer to BONDEK® II Design Software to Eurocodes.



# LYSAGHT® BONDEK® II FORMWORK/SLAB SPAN TABLES

Maximum slab spans, mm

Single span L/180

Slab depth D (mm)	0.75 mm BMT BONDEK® II			1.00 mm BMT BONDEK® II			1.20 mm BMT BONDEK® II		
	No of props per span			No of props per span			No of props per span		
	0	1	2	0	1	2	0	1	2
110	2300	4450	6700	2550	5550	8350	2700	6350	9550
120	2250	4250	6400	2450	5350	8000	2600	6100	9150
130	2200	4100	6150	2400	5150	7700	2550	5850	8800
140	2150	3900	5900	2350	4950	7450	2500	5650	8450
150	2100	3800	5700	2300	4800	7200	2450	5450	8250
160	2050	3650	5500	2250	4600	6950	2400	5250	7900
170	2000	3500	5300	2200	4500	6750	2350	5100	7650
180	1950	3400	5100	2150	4350	6550	2300	4950	7450
190	1900	3300	4950	2100	4250	6350	2250	4800	7200
200	1850	3200	4800	2100	4100	6200	2200	4650	7000
210	1800	3100	4700	2050	4000	6000	2150	4550	6850
220	1750	3050	4550	2000	3900	5850	2150	4450	6650
230	1750	2950	4450	1950	3800	5750	2100	4350	6500
240	1700	2950	4350	1950	3750	5600	2100	4250	6350
250	1650	2800	4250	1900	3650	5500	2050	4150	6200

Maximum slab spans, mm

Single span L/130

Slab depth D (mm)	0.75 mm BMT BONDEK® II			1.00 mm BMT BONDEK® II			1.20 mm BMT BONDEK® II		
	No of props per span			No of props per span			No of props per span		
	0	1	2	0	1	2	0	1	2
110	2450	4400	6600	2700	5450	8150	2850	6200	9200
120	2400	4200	6300	2650	5250	7850	2800	5950	8900
130	2350	4050	6050	2600	5050	7550	2750	5750	8550
140	2300	3900	5800	2550	4850	7300	2700	5550	8250
150	2250	3750	5600	2500	4700	7050	2650	5350	8000
160	2200	3600	5400	2450	4550	6850	2600	5200	7750
170	2150	3500	5250	2400	4450	6650	2550	5050	7500
180	2100	3400	5100	2350	4300	6450	2500	4900	7300
190	2100	3300	4950	2300	4200	6300	2450	4750	7100
200	2050	3200	4800	2250	4100	6100	2400	4600	6900
210	2000	3100	4650	2250	4000	5950	2350	4500	6750
220	1950	3000	4550	2200	3900	5800	2350	4400	6600
230	1950	2950	4400	2200	3800	5700	2300	4300	6450
240	1900	2850	4300	2150	3700	5550	2300	4200	6300
250	1900	2800	4200	2100	3600	5450	2250	4100	6150

- NOTES:**
1. These are formwork selection tables only. Maximum slab spans in these tables shall be designed by a qualified structural engineer.
  2. Use LYSAGHT® BONDEK® II design software for support widths other than 100mm.
  3. Live Load due to stacked materials before concrete is placed shall not exceed 1kPa.
  4. Refer to 'Use of formwork tables' when using these tables.
  5. BONDEK® II sheets continue over single slab span.
  6. Formwork deflections limits L/180 (Visual appearance important).
  7. Formwork deflections limits L/130 (Visual appearance not important).

Maximum slab spans, mm

Double span L/180

Slab depth D (mm)	0.75 mm BMT BONDEK® II			1.00 mm BMT BONDEK® II			1.20 mm BMT BONDEK® II		
	No of props per span			No of props per span			No of props per span		
	0	1	2	0	1	2	0	1	2
110	2900	4450	6700	3600	5550	8350	3750	6350	9550
120	2850	4250	6400	3500	5350	8000	3700	6100	9150
130	2750	4100	6150	3400	5150	7700	3600	5850	8800
140	2700	3900	5900	3300	4950	7450	3500	5650	8450
150	2650	3800	5700	3250	4800	7200	3450	5450	8200
160	2550	3650	5500	3200	4600	6950	3350	5250	7900
170	2500	3500	5300	3100	4500	6750	3300	5100	7650
180	2450	3400	5100	3050	4350	6550	3250	4950	7450
190	2400	3300	4950	3000	4250	6350	3200	4800	7200
200	2350	3200	4800	2950	4100	6200	3150	4650	7000
210	2300	3100	4700	2900	4000	6000	3100	4550	6850
220	2300	3050	4550	2850	3900	5850	3050	4450	6650
230	2250	2950	4450	2800	3800	5750	3000	4350	6500
240	2200	2900	4350	2750	3750	5600	2950	4250	6350
250	2150	2800	4250	2700	3650	5500	2900	4150	6200

Maximum slab spans, mm

Double span L/130

Slab depth D (mm)	0.75 mm BMT BONDEK® II			1.00 mm BMT BONDEK® II			1.20 mm BMT BONDEK® II		
	No of props per span			No of props per span			No of props per span		
	0	1	2	0	1	2	0	1	2
110	2850	4400	6600	3550	5450	8150	4000	6150	9250
120	2800	4200	6300	3500	5200	7850	3900	5900	8900
130	2700	4050	6050	3400	5050	7550	3800	5700	8600
140	2650	3900	5850	3300	4850	7300	3700	5500	8300
150	2600	3750	5600	3250	4700	7050	3650	5350	8000
160	2550	3600	5450	3200	4550	6850	3550	5150	7750
170	2500	3500	5250	3100	4400	6650	3500	5000	7550
180	2450	3400	5100	3050	4300	6450	3450	4850	7300
190	2400	3300	4950	3000	4200	6300	3350	4750	7100
200	2350	3200	4800	2950	4050	6100	3300	4600	6900
210	2300	3100	4650	2900	3950	5950	3250	4500	6750
220	2250	3000	4550	2850	3850	5800	3200	4400	6600
230	2200	2950	4400	2800	3800	5700	3150	4300	6450
240	2200	2850	4300	2750	3700	5550	3100	4200	6300
250	2150	2800	4200	2700	3600	5450	3050	4100	6150

- NOTES:**
1. These are formwork selection tables only. Maximum slab spans in these tables shall be designed by a qualified structural engineer.
  2. Use LYSAGHT® BONDEK® II design software for support widths other than 100mm.
  3. Live Load due to stacked materials before concrete is placed shall not exceed 1kPa.
  4. Refer to 'Use of formwork tables' when using these tables.
  5. BONDEK® II sheets continue over Two slab span.
  6. Formwork deflections limits L/180 (Visual appearance important)
  7. Formwork deflections limits L/130 (Visual appearance not important)
  8. Equal slab spans

Maximum slab spans, mm

Triple span L/180

Slab depth D (mm)	0.75 mm BMT BONDEK® II			1.00 mm BMT BONDEK® II			1.20 mm BMT BONDEK® II		
	No of props per span			No of props per span			No of props per span		
	0	1	2	0	1	2	0	1	2
110	2900	4450	6700	3350	5550	8350	3550	6350	9550
120	2850	4250	6400	3250	5350	8000	3450	6100	9150
130	2750	4100	6150	3150	5150	7700	3350	5850	8800
140	2700	3900	5900	3050	4950	7450	3250	5650	8450
150	2650	3800	5700	3000	4800	7200	3200	5450	8200
160	2550	3650	5500	2950	4600	6950	3100	5250	7900
170	2500	3500	5300	2900	4500	6750	3050	5100	7650
180	2450	3400	5100	2800	4350	6550	3000	4950	7450
190	2400	3300	4950	2750	4250	6350	2950	4800	7200
200	2350	3200	4800	2700	4100	6200	2900	4650	7000
210	2300	3100	4700	2650	4000	6000	2850	4550	6850
220	2300	3050	4550	2600	3900	5850	2800	4450	6650
230	2250	2950	4450	2550	3800	5750	2750	4350	6500
240	2200	2900	4350	2500	3750	5600	2700	4250	6350
250	2150	2800	4250	2450	3650	5500	2650	4150	6200

Maximum slab spans, mm

Triple span L/130

Slab depth D (mm)	0.75 mm BMT BONDEK® II			1.00 mm BMT BONDEK® II			1.20 mm BMT BONDEK® II		
	No of props per span			No of props per span			No of props per span		
	0	1	2	0	1	2	0	1	2
110	2850	4400	6600	3500	5450	8150	3700	6150	9250
120	2750	4200	6300	3450	5200	7850	3650	5900	8900
130	2700	4050	6050	3350	5050	7550	3550	5700	8600
140	2650	3900	5800	3300	4850	7300	3500	5500	8300
150	2550	3750	5600	3200	4700	7050	3400	5350	8000
160	2500	3600	5400	3150	4550	6850	3350	5150	7750
170	2450	3500	5250	3100	4400	6650	3300	5000	7550
180	2400	3400	5100	3050	4300	6450	3250	4850	7300
190	2350	3300	4950	3000	4200	6300	3200	4750	7100
200	2350	3200	4800	2950	4050	6100	3150	4600	6950
210	2300	3100	4650	2900	3950	5950	3100	4500	6750
220	2250	3000	4550	2850	3850	5800	3050	4400	6600
230	2200	2950	4400	2800	3800	5700	3000	4300	6450
240	2200	2850	4300	2750	3700	5550	2950	4200	6300
250	2150	2800	4200	2700	3600	5450	2950	4100	6150

- NOTES:**
1. These are formwork selection tables only. Maximum slab spans in these tables shall be designed by a qualified structural engineer.
  2. Use LYSAGHT® BONDEK® II design software for support widths other than 100mm.
  3. Live Load due to stacked materials before concrete is placed shall not exceed 1kPa.
  4. Refer to 'Use of formwork tables' when using these tables.
  5. Equal slab spans.
  6. BONDEK® II sheets continue over Three slab span.
  7. Formwork deflections limits L/180 (Visual appearance important).
  8. Formwork deflections limits L/130 (Visual appearance not important).

## INSTALLATION AND CONSTRUCTION DETAILS



**Step 1: Place BONDEK® II sheet bundles on support**



**Step 2: Place props if required**



**Step 3 - Lay BONDEK® II sheets**



**Step 4 - Trim BONDEK® II sheets, if required**

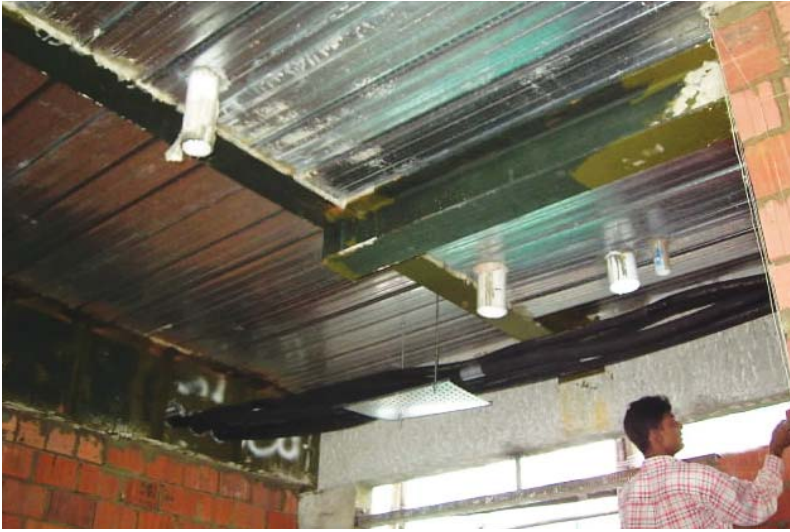


**Step 5: Fix BONDEK® II sheets to steel beams**



**Step 6: Install Edgeform**





**Step 7: Locate and preapre penetration, if any**



**Step 8: Place steel reinforcement bars**



**Step 9: Remove dirt and contaminants**



**Step 10: Place concrete**

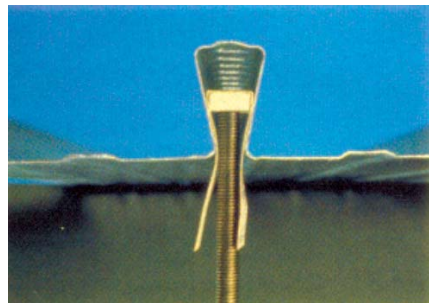


**Step 11: Allow slab to cure and remove props**

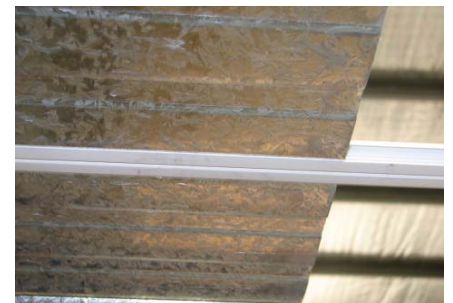
**Step 12: Install services and ceilings with BONDEK® II accessories**



**Step 12a) Bonwedge**



**Step 12b) Bon-nut**



**Step 13 Bonstrip**

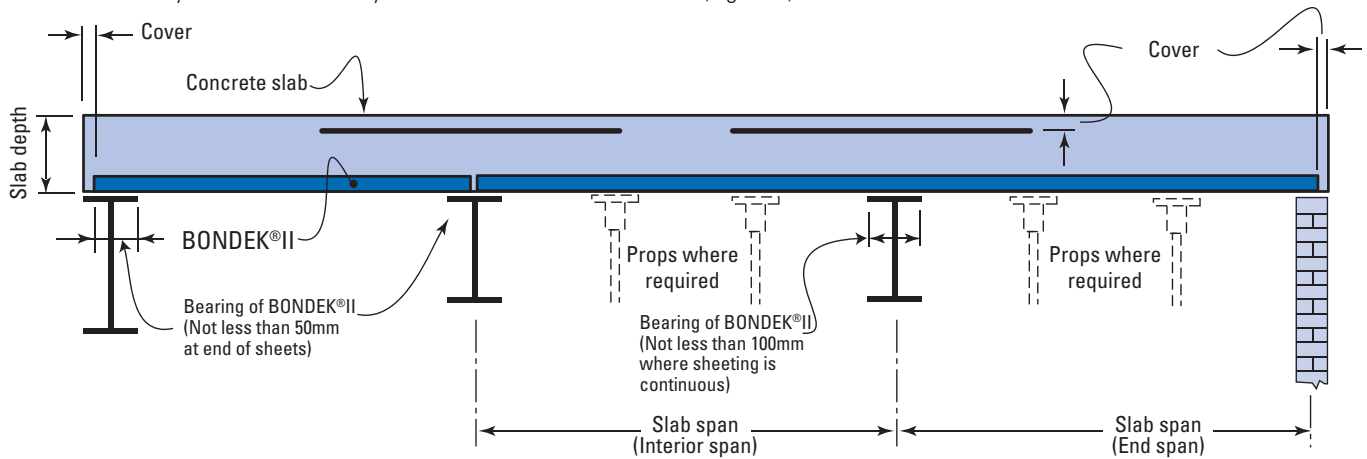
## Care and storage before installation

BONDEK® II is delivered in strapped bundles. If not required for immediate use, stack sheets or bundles neatly and clear of the ground, on a slight slope to allow drainage of water. If left in the open, protect with waterproof covers.

## Installation of BONDEK® II sheeting on-site

Installing BONDEK® II on steel frames

BONDEK® II may be installed directly on erected structural steelwork. (Figure 4)



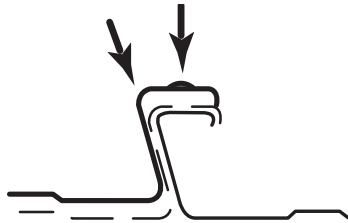
**Figure 4**  
BONDEK® II Installation guidelines

## Interlocking of sheets

Overlapping ribs of BONDEK® II sheeting are interlocked. Either of two methods can be used in most situations, though variations may also work. (Figure 5)

### Method 1

Position BONDEK® II sheet parallel with previously-laid sheet. Interlock sheets by applying pressure to either position.



### Method 2

Position BONDEK® II sheet at an angle. Interlock sheets by lowering sheet through an arc.



**Figure 5**

Two methods of interlocking two adjacent BONDEK® II sheets

## Securing the sheeting platform

BONDEK® II shall be securely fixed to supporting structures using:

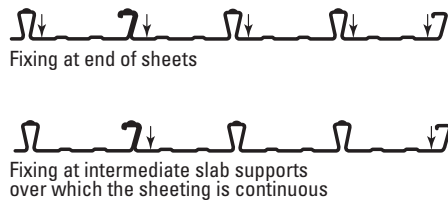
- weights;
- screws or nails into the propping bearers; or
- Spot welding

Take care if you use penetrating fasteners (such as screws and nails) because they can make removal of the props difficult, and perhaps result in damage to the BONDEK® II.

## General fastening of BONDEK® II

One fixing system is as follows.

- At the end of sheets: use a fixing at every rib (Figure 6).
- At each intermediate slab support over which the sheeting is continuous: use a fixing at the ribs on both edges (Figure 6).
- Fix BONDEK® II with drive nails, self-drilling screws or spot welds.
- Drive nails should be powder-activated, steel nails 4mm nominal diameter, suitable for structural steel of 4 mm thickness or greater.
- For structural steel up to 12mm thick, use 12-24 x 38mm self-drilling self-tapping hexagon head screws.
- For structural steel over 12mm thick, pre-drill and use 12-24 x16mm hexagon head screws.
- Spot welds should be 12mm minimum diameter. Use 3.25mm diameter cellulose, iron powder AC/DC high penetration electrodes. Surfaces to be welded shall be free of loose material and foreign matter. Where the BONDEK® II soffit or the structural steelwork has a pre-painted surface, securing methods other than welding may be more appropriate. Take suitable safety precautions against fumes during welding zinc coated products.

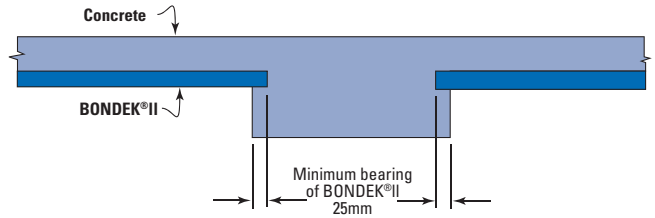


**Figure 6**

Positions for fixing BONDEK® II sheet to steel framing

## Installing BONDEK® II on concrete-frames

When used in concrete-frame construction, the BONDEK® II sheeting is discontinuous through the supports (Figure 7).

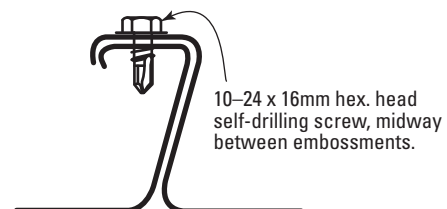


**Figure 7**

BONDEK® II is discontinuous in concrete-frame construction

## Fastening side-lap joints

If BONDEK® II sheeting has been distorted in transport, storage or erection, side-lap joints may need fastening to maintain a stable platform during construction, to minimise concrete seepage during pouring, and to gain a good visual quality for exposed soffits (Figure 8).



**Figure 8**

Fixing at a side lap

## Cutting of sheeting

It is easy to cut BONDEK® II sheets to fit. Use a power saw fitted with an abrasive disc or metal cutting blade. Initially lay the sheet with its ribs down, cut through the pans and part-through the ribs, then turn over and finish by cutting the tops of the ribs.

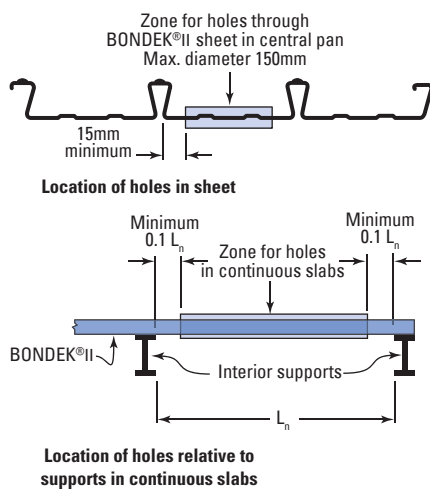
## Holes in sheeting

BONDEK® II acts as longitudinal tensile reinforcement similarly to conventional bar or fabric reinforcement does in concrete slabs. Consequently, holes in BONDEK® II sheets, to accommodate pipes and ducts, reduce the effective area of the steel sheeting and can adversely effect the performance of a slab.

Some guidelines for holes are: (Figure 9)

- Place holes in the central pan of any sheet, with a minimum edge distance of 15mm from the rib gap.
- Holes should be round, with a maximum diameter of 150mm.
- For slabs designed as a continuous slab: space holes from an interior support of the slab no less than one tenth of a clear span.

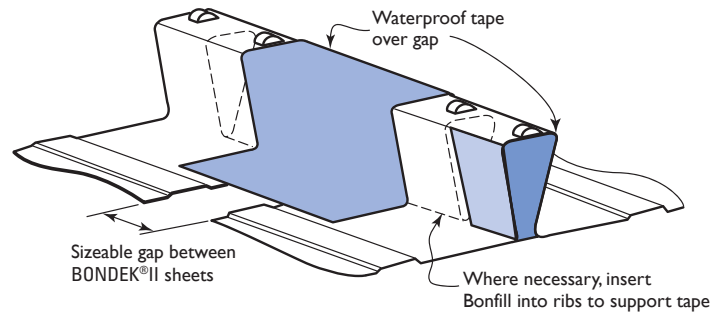
**Note:** In the event of BONDEK® II ribs being cut for larger penetrations, sufficient reinforcing steel and detailing is required to replace lost BONDEK® II ribs. Attention to propping at these locations is essential.



**Figure 9**  
Penetration through BONDEK® II sheets.

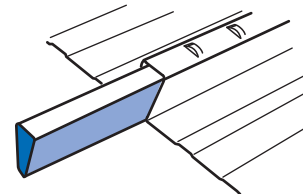
## Sealing

Seepage of water or fine concrete slurry can be minimised by following common construction practices. Generally gaps are sealed with waterproof tape, or Bonfill (Figure 10) or by sandwiching contraction joint material between the abutting ends of BONDEK® II sheet. If there is a sizeable gap you may have to support the waterproof tape.



### End plug

Polyethylene end plug stops concrete and air from entering end of BONDEK® II ribs.



### Bonfill

Polystyrene foam stops concrete and air entering ends of ribs.  
Stock length: 1200mm  
Required: 300mm per sheet of BONDEK® II

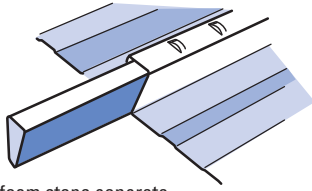
**Figure 10**  
Typical sealing of BONDEK® II  
Use waterproof tape to seal joints in BONDEK® II sheets



# ACCESSORIES

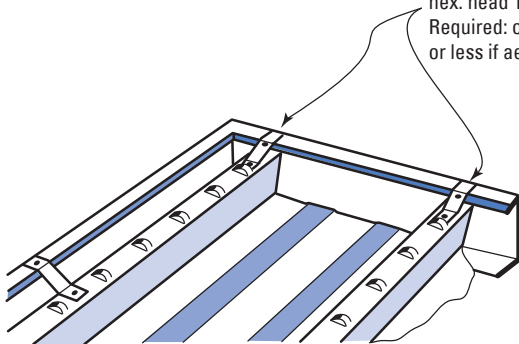
## Bonfill

Polystyrene foam stops concrete and air entering ends of ribs.  
Stock length: 1200mm  
Required: 300mm per sheet of BONDEK® II.



## Tie-back strap

25mm x 1.0mm fixed with #10-16 x16 hex. head Tek screws with drill point.  
Required: one every 600mm or less if aesthetics are required.



## Edgeform

A galvanised section that creates a permanent formwork at the slab edges—cut, mitred and screwed on site.

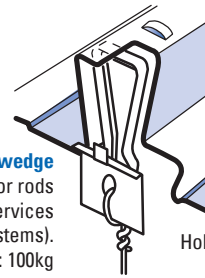


## Rib end plug

Polyethylene end plug minimises concrete slurry seeping through.

## Bonwedge

Lightweight bracket for rods to suspend ceilings or services (other than fire sprinkler systems).  
Max. load: 100kg



Hole 8mm diameter

## Configuration

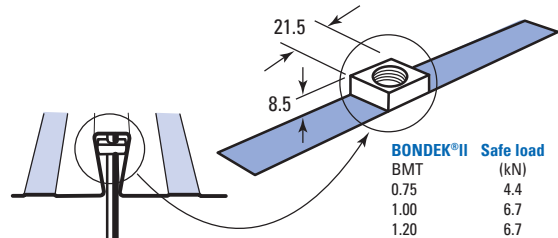
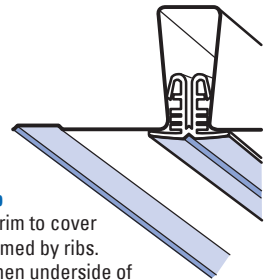
Single Bonwedge  
Double Bonwedge  
Double Bonwedge

## Loading (kN)

Eccentric 1.0  
Eccentric 1.3  
Centra 1.7

## Bonstrip

Plastic trim to cover gaps formed by ribs. Used when underside of BONDEK® II forms an exposed ceiling. Stock length: 3000mm. Allows plasterboard to be fixed to BONDEK® II.



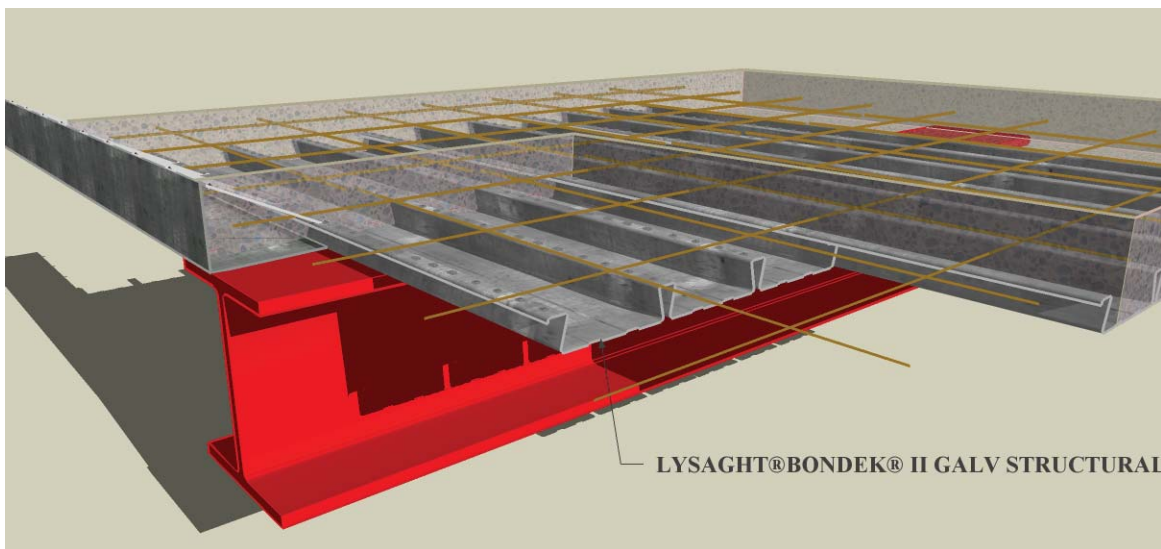
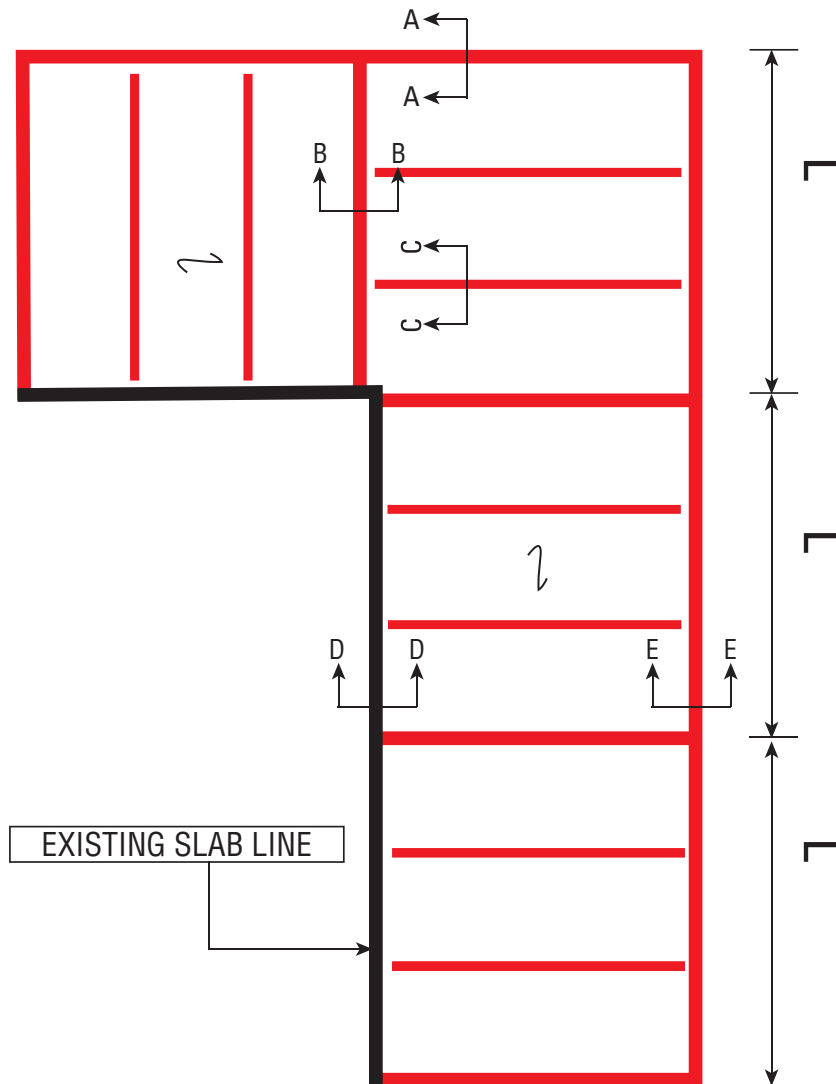
BONDEK® II	Safe load (kN)
BMT	4.4
0.75	6.7
1.00	6.7
1.20	6.7

## Bon-nut

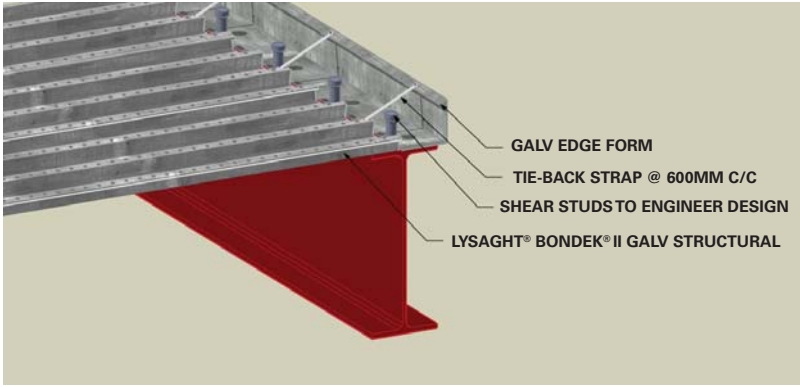
Heavy duty square nut to suspend ceilings or services. Glued to a paper strip it makes insertion easy. Threads: M8, M10 and M12. M6 is available for light loads only (2.7 kN or less)

Figure 11  
BONDEK® II accessories

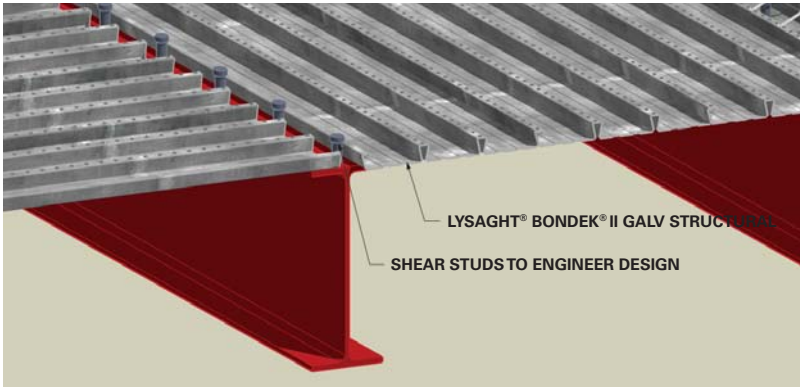
# TYPICAL STEEL FRAMING PLAN & SECTION DETAILS



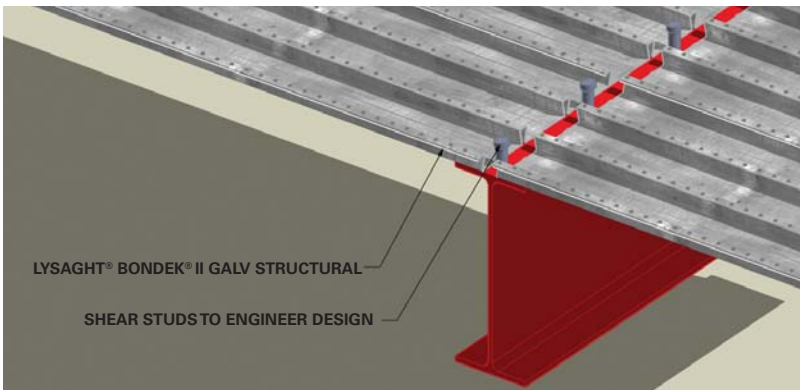
**Cut-away view of composite concrete slab**



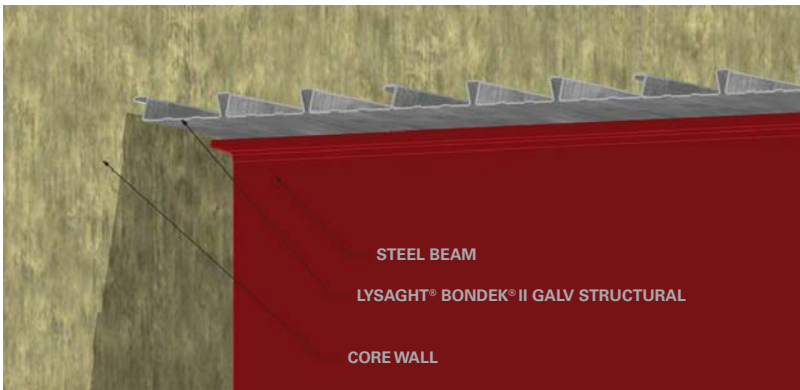
**Section A-A**



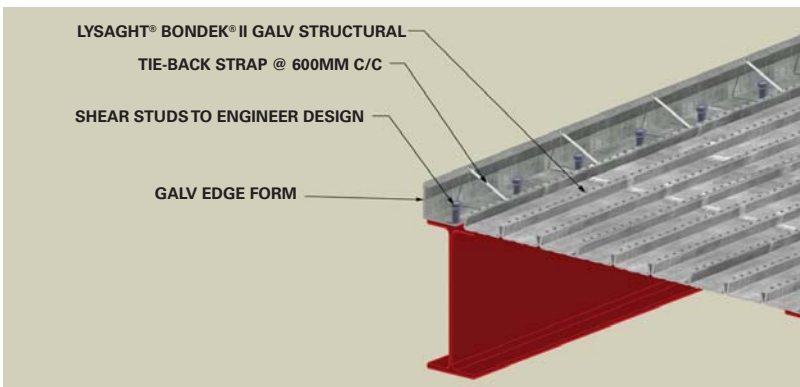
**Section B-B**



**Section C-C**



**Section D-D**



**Section E-E**



# LYSAGHT®

## THERE IS NO EQUIVALENT

**For technical enquiries:**

**NS BlueScope Lysaght Singapore Pte Ltd**

18 Benoi Sector, Singapore 629851

Tel: (+65) 6264 1577, Fax: (+65) 6265 0951

email: [SGsupport@bluescopesteel.com](mailto:SGsupport@bluescopesteel.com), web: [www.lysaght.com.sg](http://www.lysaght.com.sg)

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