



LYSAGHT® POWERDEK™

Design and Construction Guide

Outstanding new performance in structural steel decking



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POWERDEK™

INTRODUCTION

Welcome to the POWERDEK™ Structural Steel Decking Design and Construction Manual. Two different depth of POWERDEK, namely POWERDEK™ 100 (100 mm overall depth, refer to Figure 2.2) and POWERDEK™ 120 (120 mm overall depth, refer to Figure 2.3) are available from BlueScope Lysaght. Henceforth these two products shall be referred as POWERDEK™ in this manual.

New BlueScope Lysaght POWERDEK™ will revolutionise how you design concrete slabs. It gives you significantly increased spans and substantially increased load capacities. Designing composite concrete slabs is now easier and more economical than ever before.

POWERDEK™ is high performance profiled zinc-coated steel decking for use in the construction of composite floor slabs. It can be used as a formwork during construction and as a reinforcement system in composite slabs.

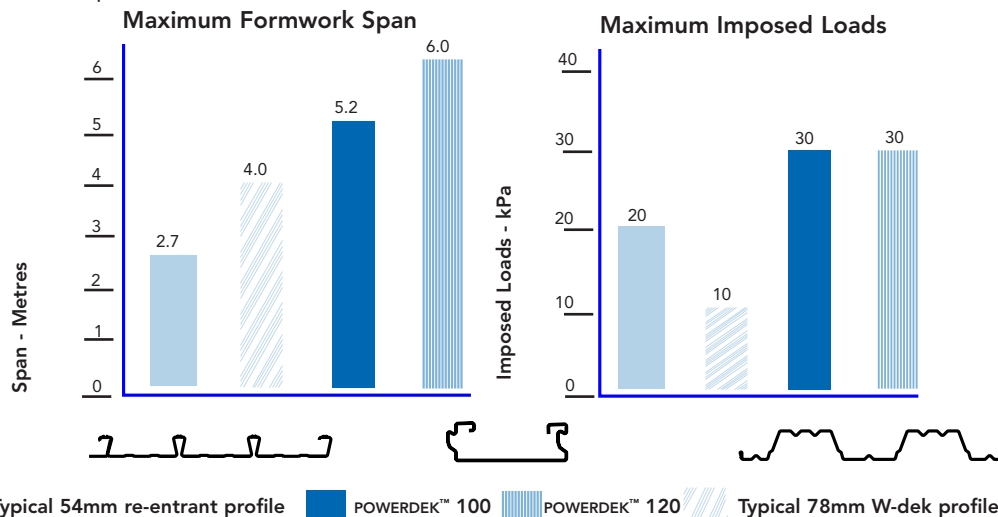
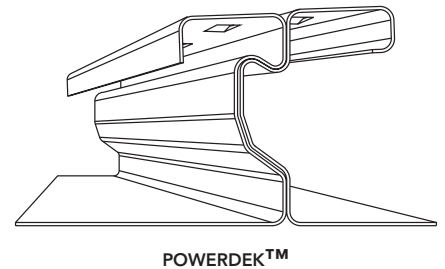
POWERDEK™ uses high tensile steels to give you longer unpropped spans. It is precambered to minimise formwork deflection, which provides better appearance with exposed ceilings. POWERDEK™ 100 shall be used when long unpropped spans of up to 5.2 m are required. POWERDEK™ 120 shall be used when long unpropped spans of up to 6.0 m are required. Its shear bond capacity is sufficient for imposed loads of up to 30kPa.

An extensive series of tests on POWERDEK™ steel deck has been performed at BlueScope Lysaght Technology facility at Chester Hill, Sydney Australia in order to thoroughly investigate its structural behaviour as formwork, and as longitudinal reinforcement in one-way composite slabs. The POWERDEK™ slabs have been also fire rated based on fire tests performed at Victoria University of Technology. Because the profile is encased in concrete, it has exceptional fire performance, with no extra reinforcement required for up to a three hour fire rating.

Comprehensive design rules have been prepared in accordance with British Standard BS 5950: Part 4 1994 "Structural uses of steel work in buildings - Code of practice for design of composite slabs with profiled steel sheeting". This publication contains complete technical information on the following grades of POWERDEK™ 100 and POWERDEK™ 120.

- POWERDEK™ 10010 1.0 mm thickness
- POWERDEK™ 10012 1.2 mm thickness
- POWERDEK™ 10015 1.5 mm thickness
- POWERDEK™ 12012 1.2 mm thickness
- POWERDEK™ 12015 1.5 mm thickness

Additionally, the forthcoming book includes POWERDEK™ 100 and POWERDEK™ 120, easy to use interactive Excel-based software, which enables you to bypass the tables altogether and get quick and more economical solutions with more options.



1 FEATURES AND APPLICATIONS

1.1 SPANNING CAPACITIES

Long unpropped spanning capability is one of major advantages of using POWERDEK™ 100 as it can span up to 5.2 m with 1.5 mm thickness of sheeting. POWERDEK™ 120 can span up to 6.0 m with 1.5 mm thickness. The superior spanning capacities achieved due to several factors:

- Unique structurally effective and stable profile.
- High tensile 450 to 550 MPa yield stress steel.
- Greatly reduced deflections due to precamber.

1.2 GREATER COMPOSITE ACTION

The profile has the highest shear-bond capacity among all known steel decking profiles. This allows to withstand very high imposed loads of up to 30 kPa and more without additional conventional reinforcement.

1.3 DESIGN EFFICIENCY

The large range of POWERDEK™ 100 gauges available (1.5 mm, 1.2 mm and 1.0 mm) and POWERDEK™ 120 (1.5 mm, 1.2 mm) allows much closer matching of design requirements and deck performance.

1.4 ECONOMICAL DESIGN FOR FIRE

The POWERDEK™ has the best fire efficiency among all known structural decks. After 90 minutes of the standard fire test POWERDEK™ 10015 has 1200 mm² equivalent of fully effective steel per meter width. As a result, composite slabs with POWERDEK™ will not require any additional fire reinforcement in most design cases.

1.5 QUICKER TROUBLE-FREE INSTALLATION

The POWERDEK™ requires minimal fixing of ribs during installation. Its handling is very simple since no twist, rotation or sliding is necessary to lock sheets together.

1.6 MINIMAL DEFLECTION

This is another unique feature of the POWERDEK™ decking profile. Minimized deflection is achieved due to precamber which results in vertical deflections less than allowed by any strict deflection requirements.

1.7 TECHNICAL SUPPORT

BlueScope Lysaght, Singapore in conjunction with BlueScope Lysaght Technology at Chester Hill, Sydney, Australia, provide a comprehensive design and advisory service to engineers, architects and builders. Contact Decking Asia for further information. Contact details are on back cover.

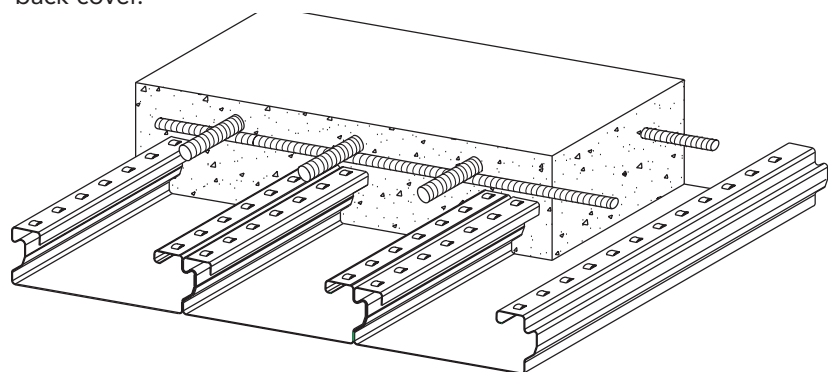


Figure 1.1
POWERDEK™ composite slab

2.1 POWERDEK COMPOSITE SLAB

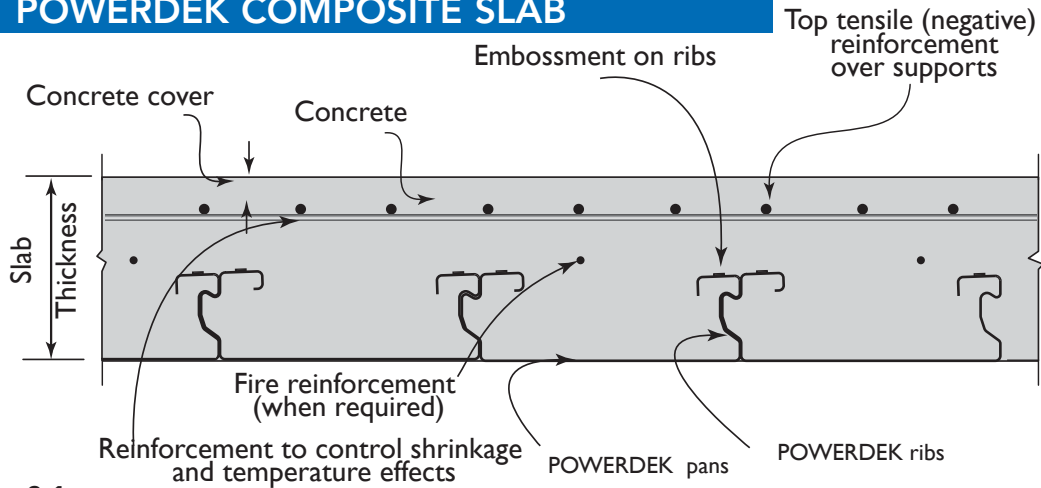


Figure 2.1
POWERDEK™ composite slab showing reinforcement

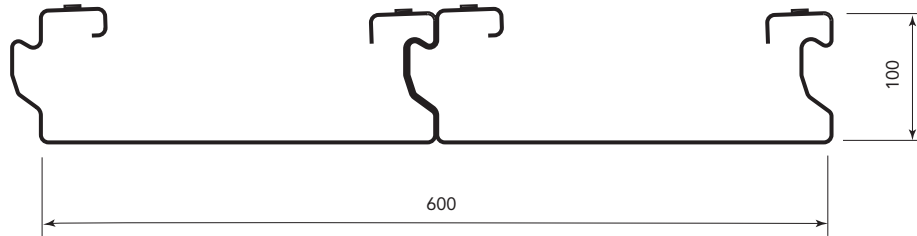


Figure 2.2
POWERDEK™ 100 profile and dimensions

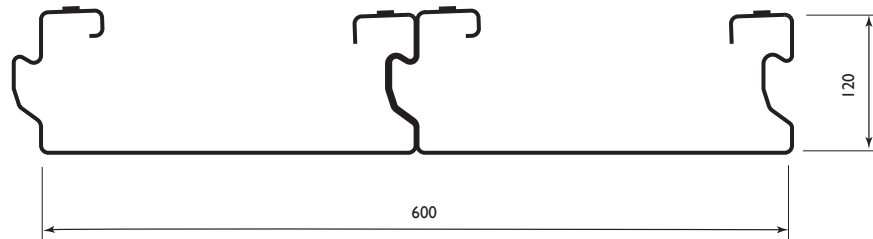


Figure 2.3
POWERDEK™ 120 profile and dimensions

2.2 POWERDEK SECTION PROPERTIES

POWERDEK™ section properties per metre of width

Base Metal Thickness mm	Area mm ²	Self Weight kg/m	Effective Second Moment of Area I _x , mm ⁴ /m	Effective Section Modulus Z _x , mm ³ /m
POWERDEK™ 100 1.0	2287	19.03	2115960	36390
POWERDEK™ 100 1.2	2715	22.62	2926700	51425
POWERDEK™ 100 1.5	3430	28.00	4218550	76100
POWERDEK™ 120 1.2	2905	24.2	4467750	70600
POWERDEK™ 120 1.5	3630	29.6	6310920	98500

Notes:

1. Self weight is given for Z450 g/mm² coating mass.
2. Effective second moment of area varies depending on spans. Values in a table are given for maximum spans.

2.3 SHEETING

POWERDEK™ 100 is rolled-formed from hot dipped, zinc-coated, high tensile steel, in base metal thickness (BMT) of 1.5, 1.2 and 1.0 mm. POWERDEK™ 120 is rolled-formed from hot dipped, aluminum/zinc-coated, high tensile steel, in base metal thickness (BMT) of 1.5 and 1.2mm.

The steel conforms to both AS 1397 and BS EN 10147, and:

- for 1.5 BMT the grade is G450 (450 MPa minimum yield strength);
- for 1.2 BMT the grade is G500;
- for 1.0 BMT the grade is G550.

The coating is Z350 (350g/m² minimum coating mass) or Z450 (450g/m² minimum coating mass) on both sides.

Embossments on the top of flanges provide the mechanical connection between the steel and concrete. Punches on sides of embossments prevent formation of air pockets under flanges.

2.4 CONCRETE

All tables have been developed for the C30 concrete with normal density of 2400 kg/m³ (wet density).

2.5 REINFORCEMENT

Steel reinforcement is necessary to control shrinkage and temperature effects, as flexural negative reinforcement over supports and in some instances for fire engineering purposes. It shall comply with requirements of BS 4449:1997 for bars and with BS 4483:1998 for fabric. Reinforcement Grade 460B shall be specified.

2.6 SHEAR CONNECTORS FOR POWERDEK™ 100

Shear studs for composite beams may be specified with POWERDEK™ to create concrete slabs as required by BS 5959:Part 3: section 3.1 where relevant. Shear studs shall not be considered when composite beams are not a design option such as concrete frame buildings or composite slabs supported by masonry walls.

2.7 DESIGN METHODS

There are three ways you can design concrete slabs using POWERDEK™ :

- Use the design tables in this manual.
- Calculate from first principles following relative British Standards and using data from this manual and available through BlueScope Lysaght, Singapore and BlueScope Lysaght Technology at Chester Hill, Sydney Australia.
- Run our forthcoming POWERDEK™ 100 and POWERDEK™ 120 software. This is also likely to produce more economical design. The software will allow input of parameters which are not available in tables such as grades of concrete other than C30.

FORMWORK DESIGN

The POWERDEK™ formwork shall be designed in accordance to BS 5950: Part 4: 1994 and BS 5950: Part 6: 1995. AS/NZS 4600:1996 may be used when British Standards are not sufficient.

Bending capacities have been confirmed by testing performed at BlueScope Lysaght Technology facility at Chester Hill, Sydney Australia.

Our design tables can be used as a structural formwork, provided the following conditions are satisfied:

- The support lines extend across the full width of the sheeting and have a minimum bearing of 50 mm at the ends of the sheets when rest on steel or concrete and 70 mm when rest on other materials such as brick or block.
- The sheets continue within each slab span length without any overlaps or intermediate splicing or jointing.
- The sheets are designed as single span formwork. No permanent or temporary intermediate supports shall be used.
- The slab has a uniform cross section.
- The formwork is not used as a restraint to supporting steel beams during construction. When necessary, restraint capacities can be analysed following first principles.
- Separate consideration is given to sides of the sheeting where edges shall be restrained.
- Maximum construction imposed load is 1.5 kPa, or 4.5/Span kPa for slab spans less than 3m. Construction imposed load can be applied on the POWERDEK™ formwork or recently formed slabs.
- Maximum imposed storage load on the formwork is 4 kPa. This load shall not be applied on recently formed slabs.
- Imposed construction loads shall not be applied to areas supporting storage loads and vice versa.

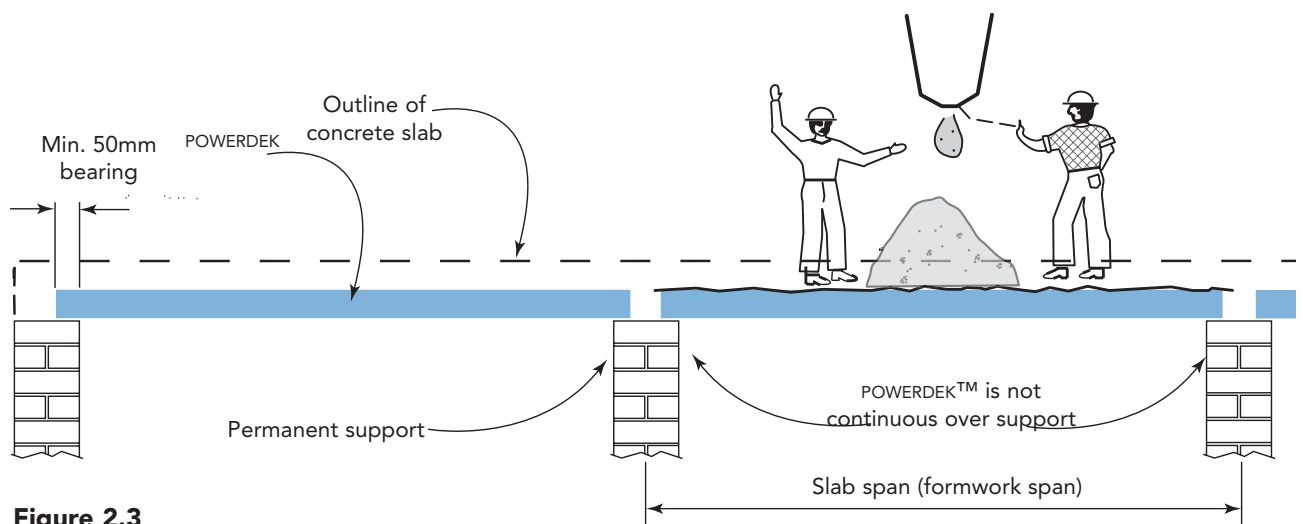


Figure 2.3
POWERDEK™ formwork

2.9 COMPOSITE SLAB DESIGN

The POWERDEK™ composite slabs shall be designed in accordance to BS 5950: Part 4: 1994, BS 8110: Part 1: 1997, BS 8110: Part 2: 1985, BS 4449: 1997. AS 3600-2001 may be used where relevant.

The design concept is based on "k" and "m" method. Data about shear-bond capacity have been obtained from full-scale tests and supplementary small-scale slip-block tests. The tables provide with solutions for steel frame or masonry wall types of construction.

Our design tables and software can be used to design composite slabs with POWERDEK, provided the following conditions are satisfied:

- The ratio of longer slab span (L_1) to the shorter slab span (L_2) of any two adjacent spans does not exceed 1.2, that is $L_1/L_2 \leq 1.2$.
- The bending moments at the supports are only caused by the action of vertical loads applied to the slab.
- The first interior span shall have the same thickness as the end span.
- The geometry of the steel sheeting profile shall conform to the dimensions and tolerances shown on our production drawings.

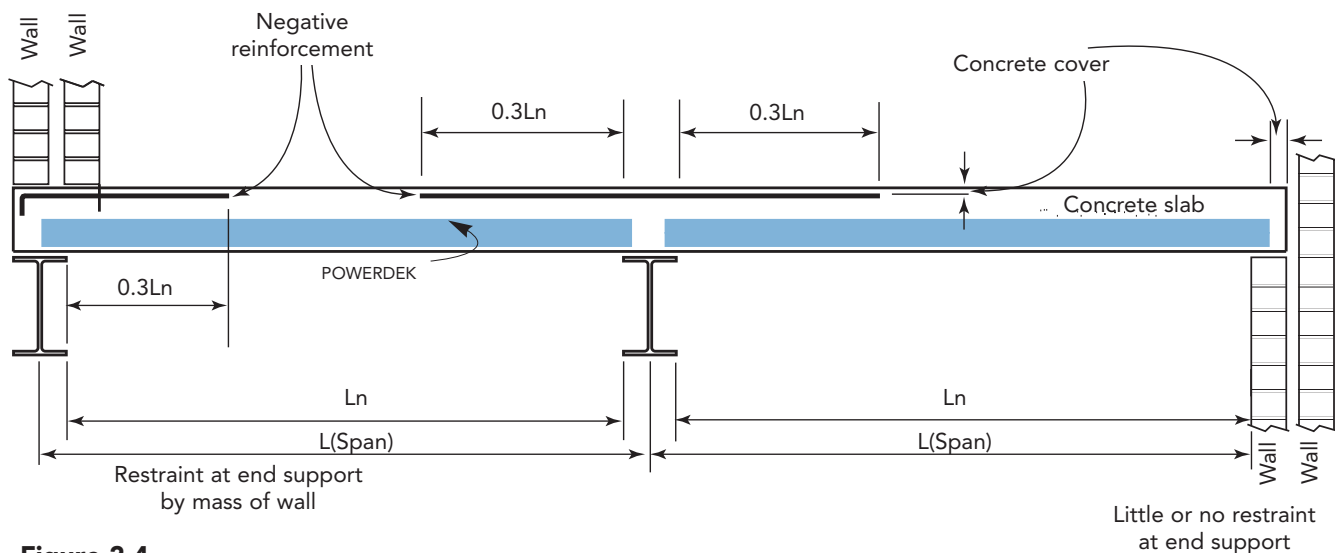


Figure 2.4
POWERDEK™ Pattern 1 for conventional (standard) reinforcement)

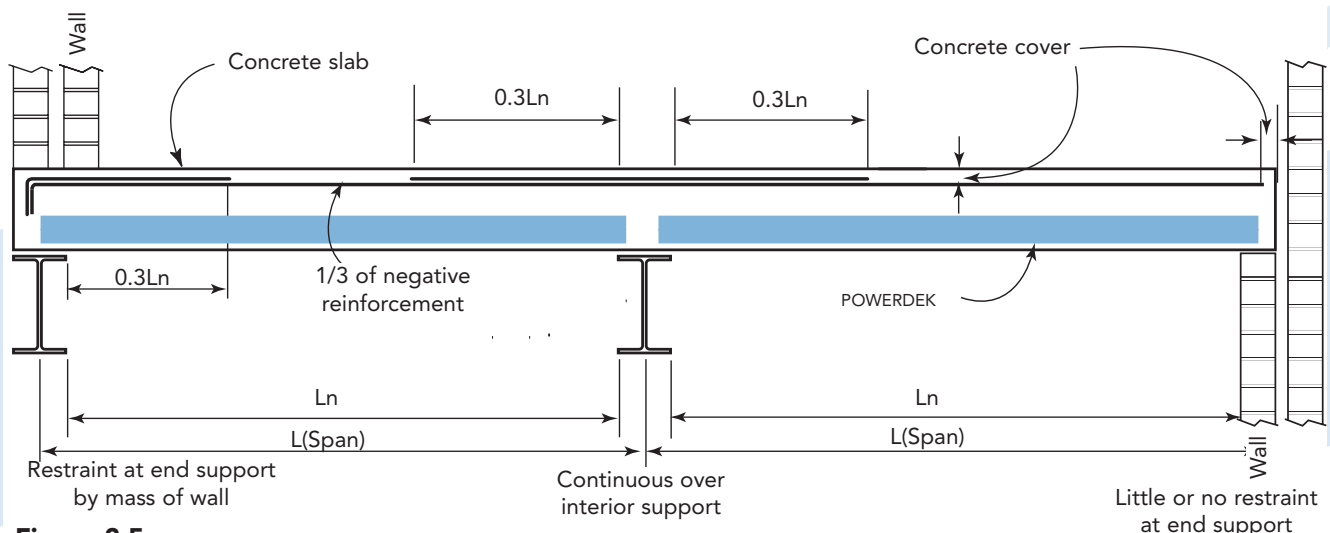


Figure 2.5
POWERDEK™ Pattern 2 for conventional reinforcement when imposed load exceeds twice the dead load

Sheeting with embossments of a depth less than that specified on these drawings shall not be used as composites unless the values of "k" and "m" are revised.

- The specified concrete strength is in the range C30 to C40 (only C30 is available in tables). The wet concrete density must be 2400 kg/m³ for normal weight concrete. The concrete shall follow the recommendations given in BS 8110.
- Composite action should be assumed to exist between the steel sheeting and the concrete once the concrete in the slab has attained a compressive strength of 20 Mpa. Prior to the development of composite action during construction, potential damage to the shear connection must be avoided, and maximum construction imposed loads shall be limited to 1.5 kPa.
- Reinforcement Pattern 2 shall be used when imposed load exceeds twice the dead load.

2.10 DESIGN FOR FIRE

The POWERDEK™ composite slabs shall be designed for fire conditions in accordance to BS 5950-8: 1990, BS 476-20: 1987 and BS 476-21: 1987.

Reduction factors shall be applied to allow for the adverse effect of elevated temperatures on the mechanical properties of concrete and steel. Values of these reduction factors have been derived from fire tests performed at Victoria University of Technology and extensive finite element analysis of POWERDEK™ composite slabs.

Our tables may be used to detail POWERDEK™ composite slabs when the soffit is exposed to fire provided the following conditions are satisfied:

- The composite slab acts as a one-way element spanning in the direction of the sheeting ribs for both room temperature and fire conditions.
- The composite slab has been initially designed and detailed for room temperature conditions in accordance to this manual.
- The fire design load is essentially uniformly distributed and static in nature.
- Transverse reinforcement for the control of cracking due to shrinkage and temperature effects is provided.
- Adequate detailing of slab jointing, edges, slab holes and cavities (for penetrating, embedded or encased services) to provide the appropriate fire resistance period. Alternatively the local provision of suitable protection (such as fire spray material) will be necessary.
- The fire periods are 30, 60, 90, 120, 180 or 240 min.

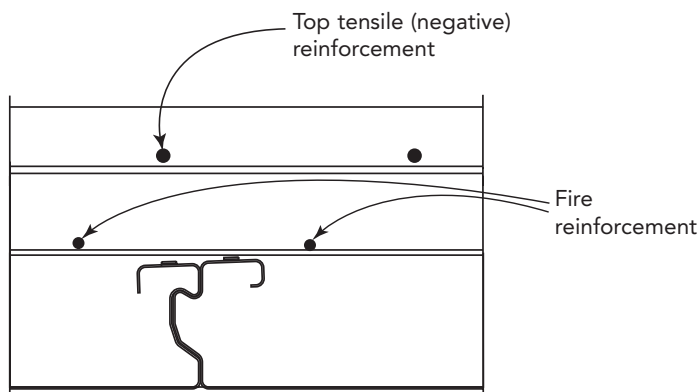


Figure 2.6
Location of fire reinforcement as mesh laid on POWERDEK™ ribs

3 POWERDEK DESIGN TABLES

3.1 DESIGN PARAMETERS USE IN THE DESIGN TABLES

The design parameters specific for each table are given on the top of tables:

- Spans: single, continuous end or interior.
- Thickness of the slab.

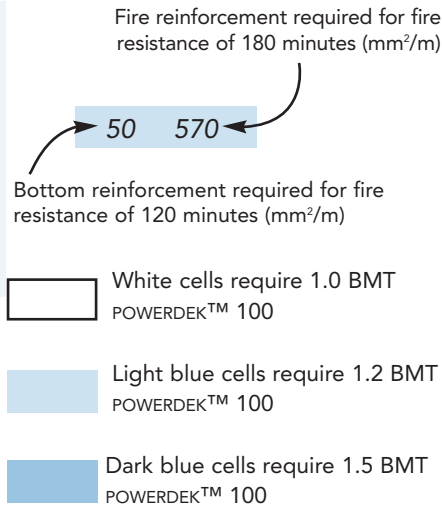
The rest of parameters are common for all tables and listed below:

- More than four spans for continuous spans
- Concrete grade: C30.
- Type of construction: steel-frame or masonry wall construction.
- Density of wet concrete: 2400 kg/m³.
- POWERDEK™ 100 used as a structural deck with thickness 1.5 , 1.2 & 1.0mm BMT
- POWERDEK™ 120 used as a structural deck with thicknesses 1.5 and 1.2mm BMT
- Formwork deflections limit: L/250.
- No temporary props.
- Maximum storage imposed loads on formwork: 4 kPa.
- Minimum 100 mm width of permanent supports.
- Mild conditions of exposure.
- Composite slab deflection limits: L/250 for total loads and L/350 for imposed loads.
- Indoor conditions for creep and shrinkage.
- Ratio of longer adjacent span to shorter does not exceed 1.2.
- Degree of redistribution of negative reinforcement is 10%.
- Flexural cracks over supports are limited to 0.3 mm.
- Maximum 12 mm diameter reinforcing bars.
- Office type of imposed loads: 25% of imposed loads are permanent.
- 1 kPa of superimposed dead load.
- Reinforcement: 460B grade in accordance to BS 4449:1997 for bars and BS 4483:1998 for fabric.
- 0.8 factor for imposed loads for fire conditions.
- 180 and 240 min. fire resistance levels (continuous spans) and 120 and 180 minutes for single spans, in case of POWERDEK™ 100™.
- 120 and 180 min. fire resistance levels (continuous spans) and 90 and 120 minutes for single span, in case of POWERDEK™ 120™.

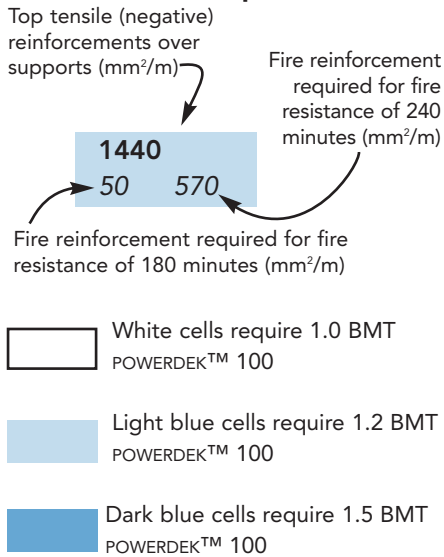
POWERDEK™

POWERDEK™ 100™

KEY - Single Spans



KEY - Continuous Spans

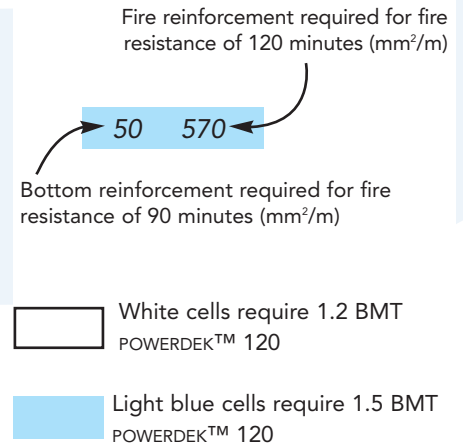


Notes:

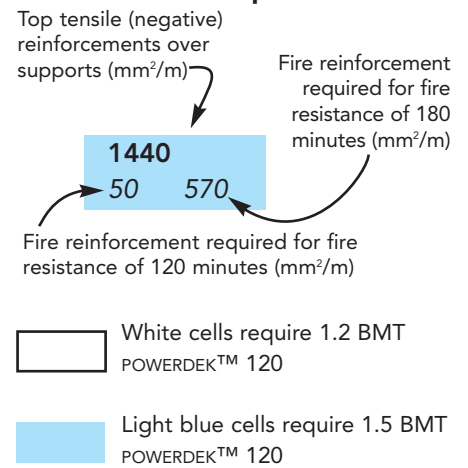
1. Areas without cells mean that a design solution is not possible.
2. Single spans do not require top tensile reinforcement, relevant cells are not shown.
3. All spans are centre to centre.
4. A dash (-) means no fire reinforcement is necessary.
5. N/A means a design solution with this particular fire rating is not possible.

POWERDEK™ 120™

KEY - Single Spans



KEY - Continuous Spans



Notes:

1. Areas without cells (blank areas) mean that a design solution is not possible.
2. Single spans do not require top tensile reinforcement, relevant cells are not shown.
3. All spans are centre to centre.
4. A dash (-) means no fire reinforcement is necessary.
5. N/A means a design solution with this particular fire rating is not possible.

3.2

SINGLE SPAN DESIGN TABLES POWERDEK™ 100

Single Spans 150 mm slab		Characteristic Imposed Load Q _k (kPa)							
Span (mm)		2	3	5	7.5	10	15	20	25
3000	- -	- -	- -	- -	- -	- 100	- N/A		
3200	- -	- -	- -	- -	- -	- N/A			
3400	- -	- -	- -	- -	- N/A	- N/A			
3600	- -	- -	- -	- 80	- N/A				
3800	- -	- -	- -	- N/A	- N/A				
4000	- -	- -	- 50	- N/A					
4200	- -	- -	- N/A	- N/A					
4400	- 190	- N/A							
4600	- N/A	- N/A							
4800	- N/A								
5000	- N/A								
5200									

Single Spans 160 mm slab		Characteristic Imposed Load Q _k (kPa)							
Span (mm)		2	3	5	7.5	10	15	20	25
3000	- -	- -	- -	- -	- -	- -	- N/A	160 N/A	
3200	- -	- -	- -	- -	- -	- 20	- N/A		
3400	- -	- -	- -	- -	- -	- 270	- N/A		
3600	- -	- -	- -	- -	- 150	- N/A			
3800	- -	- -	- -	- -	- 300	10 N/A			
4000	- -	- -	- -	- 130	- N/A				
4200	- -	- -	- -	- 300					
4400	- -	- -	- 130	- N/A					
4600	- 80	- 290							
4800	- 290	- N/A							
5000	- N/A	- N/A							
5200									

Single Spans 170 mm slab		Characteristic Imposed Load Q _k (kPa)							
Span (mm)		2	3	5	7.5	10	15	20	25
3000	- -	- -	- -	- -	- -	- -	- 20	- 390	210 N/A
3200	- -	- -	- -	- -	- -	- -	- 220	90 N/A	
3400	- -	- -	- -	- -	- -	- 10	- N/A		
3600	- -	- -	- -	- -	- -	- 130	60 N/A		
3800	- -	- -	- -	- -	- 50	- 350			
4000	- -	- -	- -	- -	- 220	- N/A			
4200	- -	- -	- -	- 60	- 420				
4400	- -	- -	- -	- 220	- N/A				
4600	- -	- 50	- 410						
4800	- 20	- 200	- N/A						
5000	- 150	- 380							
5200									

SINGLE SPAN DESIGN TABLES POWERDEK™ 100

Single Spans 180 mm slab		Characteristic Imposed Load Q _k (kPa)							
Span (mm)	2	3	5	7.5	10	15	20	25	
3000	-	-	-	-	-	-	-	130	- 420
3200	-	-	-	-	-	-	40	340	180 N/A
3400	-	-	-	-	-	-	200	80 560	
3600	-	-	-	-	-	-	360		
3800	-	-	-	-	-	110	30 540		
4000	-	-	-	-	40	270			
4200	-	-	-	-	170	470			
4400	-	-	-	30	330				
4600	-	-	-	160	530				
4800	-	-	20	300					
5000	-	-	140	480					
5200									

Single Spans 190 mm slab		Characteristic Imposed Load Q _k (kPa)							
Span (mm)	2	3	5	7.5	10	15	20	25	
3000	-	-	-	-	-	-	-	-	210
3200	-	-	-	-	-	-	-	150	410
3400	-	-	-	-	-	-	60	330	190 670
3600	-	-	-	-	-	-	160	10 500	
3800	-	-	-	-	-	-	330		
4000	-	-	-	-	-	110	30 520		
4200	-	-	-	-	30	230			
4400	-	-	-	-	140	390			
4600	-	-	-	30	280	580			
4800	-	-	-	130	430				
5000									
5200									

Single Spans 200 mm slab		Characteristic Imposed Load Q _k (kPa)							
Span (mm)	2	3	5	7.5	10	15	20	25	
3000	-	-	-	-	-	-	-	-	80
3200	-	-	-	-	-	-	-	40	240
3400	-	-	-	-	-	-	-	180	20 420
3600	-	-	-	-	-	-	40	300	140 600
3800	-	-	-	-	-	-	170	40 480	
4000	-	-	-	-	-	-	320	110 690	
4200	-	-	-	-	-	100	470		
4400	-	-	-	-	30	220			
4600	-	-	-	-	140	360			
4800	-	-	-	30	260	510			
5000									
5200									

SINGLE SPAN DESIGN TABLES POWERDEK™ 100

Single Spans									
225 mm slab									
Span (mm)	Characteristic Imposed Load Q _k (kPa)								
	2	3	5	7.5	10	15	20	25	
3000	-	-	-	-	-	-	-	-	-
3200	-	-	-	-	-	-	-	-	10
3400	-	-	-	-	-	-	-	-	90
3600	-	-	-	-	-	-	-	50	220
3800	-	-	-	-	-	-	-	160	370
4000	-	-	-	-	-	50	-	270	30 510
4200	-	-	-	-	-	160	-	410	200 690
4400	-	-	-	-	-	270	80	560	
4600	-	-	-	-	90	390			
4800									
5000									
5200									

Single Spans									
250 mm slab									
Span (mm)	Characteristic Imposed Load Q _k (kPa)								
	2	3	5	7.5	10	15	20	25	
3000	-	-	-	-	-	-	-	-	-
3200	-	-	-	-	-	-	-	-	-
3400	-	-	-	-	-	-	-	-	-
3600	-	-	-	-	-	-	-	-	50
3800	-	-	-	-	-	-	-	-	140
4000	-	-	-	-	-	-	-	80	- 250
4200	-	-	-	-	-	-	-	180	- 380
4400	-	-	-	-	-	90	-	290	80 510
4600									
4800									
5000									
5200									

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SINGLE SPAN DESIGN TABLES POWERDEK™ 120

170 mm slab		Single Spans							
Span (mm)	Characteristic Imposed Load Q_k (kPa)								
	2	3	5	7.5	10	15	20	25	
3200	-	-	-	-	-	-	-	N/A	
3400	-	-	-	-	-	-	-	N/A	
3600	-	-	-	-	-	-	-	-	
3800	-	-	-	-	-	-	N/A	-	
4000	-	-	-	-	-	N/A	-	-	
4200	-	-	-	-	-	N/A	-	-	
4400	-	-	-	-	-	-	-	-	
4600	-	-	-	-	N/A	-	-	-	
4800	-	-	-	-	-	-	-	-	
5000	-	-	-	N/A	-	-	-	-	
5200	-	N/A	-	-	-	-	-	-	
5400	-	N/A	-	-	-	-	-	-	
5600	-	-	-	-	-	-	-	-	
5800	-	-	-	-	-	-	-	-	

180 mm slab		Single Spans							
Span (mm)	Characteristic Imposed Load Q_k (kPa)								
	2	3	5	7.5	10	15	20	25	
3200	-	-	-	-	-	-	-	N/A	
3400	-	-	-	-	-	-	90	N/A	
3600	-	-	-	-	-	-	N/A	-	
3800	-	-	-	-	-	-	-	-	
4000	-	-	-	-	-	-	-	-	
4200	-	-	-	-	-	N/A	-	-	
4400	-	-	-	-	-	-	-	-	
4600	-	-	-	-	-	-	-	-	
4800	-	-	-	-	-	-	-	-	
5000	-	-	-	-	N/A	-	-	-	
5200	-	-	-	-	-	-	-	-	
5400	-	-	-	N/A	-	-	-	-	
5600	-	50	-	N/A	-	-	-	-	
5800	-	-	-	-	-	-	-	-	

190 mm slab		Single Spans							
Span (mm)	Characteristic Imposed Load Q_k (kPa)								
	2	3	5	7.5	10	15	20	25	
3200	-	-	-	-	-	-	-	N/A	
3400	-	-	-	-	-	-	-	N/A	
3600	-	-	-	-	-	-	90	N/A	
3800	-	-	-	-	-	-	230	-	
4000	-	-	-	-	-	-	N/A	-	
4200	-	-	-	-	-	-	-	-	
4400	-	-	-	-	-	60	-	-	
4600	-	-	-	-	-	-	-	-	
4800	-	-	-	-	160	-	-	-	
5000	-	-	-	-	-	-	-	-	
5200	-	-	-	60	-	-	-	-	
5400	-	-	-	N/A	-	-	-	-	
5600	-	-	-	-	-	-	-	-	
5800	-	-	-	-	-	-	-	-	

SINGLE SPAN DESIGN TABLES

POWERDEK™ 120

200 mm slab		Single Spans							
Span (mm)	Characteristic Imposed Load Q_k (kPa)								
	2	3	5	7.5	10	15	20	25	
3200	-	-	-	-	-	-	-	-	
3400	-	-	-	-	-	-	-	250	
3600	-	-	-	-	-	-	90	250 N/A	
3800	-	-	-	-	-	-	40 360		
4000	-	-	-	-	-	-			
4200	-	-	-	-	-	180			
4400	-	-	-	-	-				
4600	-	-	-	-	-				
4800	-	-	-	-	-				
5000	-	-	-	-	20				
5200	-	-	-	-	280				
5400	-	-	-	-					
5600									
5800									

225 mm slab		Single Spans							
Span (mm)	Characteristic Imposed Load Q_k (kPa)								
	2	3	5	7.5	10	15	20	25	
3200	-	-	-	-	-	-	-	-	
3400	-	-	-	-	-	-	-	-	
3600	-	-	-	-	-	-	-	-	
3800	-	-	-	-	-	-	-	-	
4000	-	-	-	-	-	-	-	170	
4200	-	-	-	-	-	-	20		
4400	-	-	-	-	-	-	240		
4600	-	-	-	-	-	-			
4800	-	-	-	-	-	200			
5000	-	-	-	-	-				
5200	-	-	-	-	20				
5400									
5600									
5800									

250 mm slab		Single Spans							
Span (mm)	Characteristic Imposed Load Q_k (kPa)								
	2	3	5	7.5	10	15	20	25	
3200	-	-	-	-	-	-	-	-	
3400	-	-	-	-	-	-	-	-	
3600	-	-	-	-	-	-	-	-	
3800	-	-	-	-	-	-	-	-	
4000	-	-	-	-	-	-	-	-	
4200	-	-	-	-	-	-	-	-	
4400	-	-	-	-	-	-	-	140	
4600	-	-	-	-	-	-	10	80 340	
4800	-	-	-	-	-	-	180		
5000	-	-	-	-	-	-			
5200									
5400									
5600									
5800									

POWERDEK™

**END SPAN DESIGN TABLES
POWERDEK™ 100**

End Spans								
I 150 mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	320 - N/A	320 - N/A	330 - N/A	430 - N/A	530 - N/A	740 - N/A	970 - N/A	
3200	320 - N/A	320 - N/A	380 - N/A	490 - N/A	610 - N/A	860 - N/A		
3400	320 - N/A	330 - N/A	430 - N/A	560 - N/A	700 - N/A	980 50 N/A		
3600	320 - N/A	370 - N/A	490 - N/A	630 - N/A	790 - N/A			
3800	360 - N/A	420 - N/A	550 - N/A	720 - N/A	900 - N/A			
4000	400 - N/A	470 - N/A	610 - N/A	800 - N/A	1010 190 N/A			
4200	440 - N/A	520 - N/A	680 - N/A	900 - N/A				
4400	490 - N/A	570 - N/A	760 - N/A					
4600	540 - N/A	640 - N/A	840 - N/A					
4800	590 - N/A	700 - N/A	930 180 N/A					
5000	640 - N/A	760 - N/A						
5200	700 - N/A	840 180 N/A						

End Spans								
I 160 mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	300 - N/A	300 - N/A	320 - N/A	400 - N/A	490 - N/A	680 - N/A	880 - N/A	1090 - N/A
3200	300 - N/A	300 - N/A	360 - N/A	460 - N/A	560 - N/A	780 - N/A	1020 - N/A	1270 280 N/A
3400	300 - N/A	320 - N/A	400 - N/A	520 - N/A	640 - N/A	900 - N/A	1180 110 N/A	
3600	310 - N/A	350 - N/A	450 - N/A	590 - N/A	730 - N/A	1020 - N/A		
3800	340 - N/A	400 - N/A	510 - N/A	660 - N/A	820 - N/A	1160 100 N/A		
4000	380 - N/A	440 - N/A	570 - N/A	740 - N/A	920 - N/A			
4200	420 - N/A	490 - N/A	630 - N/A	830 - N/A	1030 - N/A			
4400	460 - N/A	540 - N/A	710 - N/A	920 - N/A	1160 210 N/A			
4600	510 - N/A	600 - N/A	780 - N/A	1020 10 N/A				
4800	560 - N/A	650 - N/A	860 - N/A	1130 270 N/A				
5000	610 - N/A	710 - N/A	940 - N/A					

END SPAN DESIGN TABLES POWERDEK™ 100

End Spans 170 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	280	280	300	380	460	630	810	1000
	-	-	-	-	-	-	-	- 140
3200	280	280	340	430	520	720	930	1160
	-	-	-	-	-	-	- 90	- 370
3400	280	300	380	490	600	830	1070	1340
	-	-	-	-	-	-	- 270	110 N/A
3600	290	340	430	550	680	940	1230	1540
	-	-	-	-	-	- 120	- 530	410 N/A
3800	330	380	480	620	760	1060	1400	
	-	-	-	-	-	- 300	200 N/A	
4000	360	420	540	690	850	1200		
	-	-	-	-	- 70	- 550		
4200	400	460	590	770	950	1350		
	-	-	-	- 10	- 210	190 N/A		
4400	440	510	660	860	1060			
	-	-	-	- 150	- 430			
4600	480	560	730	950	1180			
	-	-	- 40	- 290	20 570			
4800	530	620	800	1040	1310			
	-	-	- 140	- 480	220 N/A			
5000	580	670	880	1150				
	-	- 40	- 270	50 N/A				

End Spans 180 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	260	260	290	360	430	590	750	920
	-	-	-	-	-	-	-	-
3200	260	260	320	410	490	670	860	1060
	-	-	-	-	-	-	-	- 110
3400	260	290	360	460	560	770	990	1220
	-	-	-	-	-	-	- 60	- 280
3600	280	330	410	520	630	870	1130	1400
	-	-	-	-	-	-	- 190	10 500
3800	310	360	460	580	710	980	1280	1610
	-	-	-	-	-	- 80	- 370	230 N/A
4000	350	400	510	650	800	1110	1450	
	-	-	-	-	-	- 210	90 610	
4200	380	440	560	720	890	1240	1640	
	-	-	-	-	- 30	- 380	310 N/A	
4400	420	490	620	800	990	1390		
	-	-	-	-	- 160	60 630		
4600	460	540	690	880	1090	1550		
	-	-	-	- 90	- 290	260 N/A		
4800	500	590	750	970	1200			
	-	-	-	- 200	- 450			
5000	550	640	820	1070	1330			
	-	-	- 90	- 320	80 640			

END SPAN DESIGN TABLES POWERDEK™ 100

End Spans								
190 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	250	250	270	340	410	550	700	860
	- -	- -	- -	- -	- -	- -	- -	- -
3200	250	250	310	390	470	630	810	990
	- -	- -	- -	- -	- -	- -	- -	- -
3400	250	280	350	440	530	720	920	1130
	- -	- -	- -	- -	- -	- -	- -	- 100
3600	270	310	390	490	600	820	1050	1290
	- -	- -	- -	- -	- -	- -	- 30	- 230
3800	300	350	440	550	670	920	1190	1470
	- -	- -	- -	- -	- -	- -	- 150	- 400
4000	340	390	480	610	750	1030	1340	1670
	- -	- -	- -	- -	- -	- 50	- 300	150 630
4200	370	430	540	680	830	1150	1500	1900
	- -	- -	- -	- -	- -	- 190	30 510	370 850
4400	410	470	590	750	920	1290	1690	
	- -	- -	- -	- -	- 30	- 320	200 730	
4600	450	510	650	830	1020	1430		
	- -	- -	- -	- -	- 120	- 480		
4800	490	560	710	910	1120	1580		
	- -	- -	- -	- 60	- 220	150 670		

End Spans								
200 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	260	260	260	330	390	520	660	800
	- -	- -	- -	- -	- -	- -	- -	- -
3200	260	260	300	370	440	600	760	920
	- -	- -	- -	- -	- -	- -	- -	- -
3400	260	270	340	420	500	680	860	1060
	- -	- -	- -	- -	- -	- -	- -	- -
3600	270	300	380	470	570	770	980	1200
	- -	- -	- -	- -	- -	- -	- -	- 80
3800	290	340	420	520	630	860	1110	1360
	- -	- -	- -	- -	- -	- -	- 30	- 200
4000	330	370	460	580	710	970	1240	1540
	- -	- -	- -	- -	- -	- -	- 140	- 350
4200	360	410	510	650	790	1080	1400	1740
	- -	- -	- -	- -	- -	- 60	- 280	100 560
4400	400	450	560	720	870	1200	1560	1960
	- -	- -	- -	- -	- -	- 160	- 420	280 790
4600	430	490	620	790	960	1330	1740	
	- -	- -	- -	- -	- 10	- 270	130 600	
4800	470	540	680	860	1060	1470		
	- -	- -	- -	- -	- 90	- 390		

END SPAN DESIGN TABLES POWERDEK™ 100

End Spans								
225 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	300	300	300	300	350	470	580	700
3200	300	300	300	340	400	530	660	800
3400	300	300	310	380	450	600	750	910
3600	300	300	350	430	510	670	850	1030
3800	300	310	380	470	560	760	960	1160
4000	310	350	430	530	630	840	1070	1310
4200	340	380	470	580	700	940	1190	1460
4400	370	420	520	640	770	1040	1330	1630
4600	400	460	560	700	850	1150	1470	1810

End Spans								
250 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	330	330	330	330	330	420	520	620
3200	330	330	330	330	370	480	590	710
3400	330	330	330	350	410	540	670	810
3600	330	330	330	390	460	610	760	910
3800	330	330	360	440	520	680	850	1030
4000	330	330	400	480	570	760	950	1150
4200	330	360	440	530	630	840	1050	1280
4400	350	390	480	590	690	930	1170	1420

END SPAN DESIGN TABLES POWERDEK™ 120

End Spans 170 mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	280	280	340	430	530	720	930	1160
	-	-	-	-	-	-	-	- N/A
3400	280	300	380	490	600	830	1070	1340
	-	-	-	-	-	-	N/A	- N/A
3600	290	340	430	550	680	940	1230	
	-	-	-	-	-	-	N/A	
3800	330	380	480	620	760	1070	1400	
	-	-	-	-	-	N/A	- N/A	
4000	360	420	540	690	850	1200		
	-	-	-	-	-	N/A		
4200	400	470	600	770	960	1360		
	-	-	-	-	-	N/A		
4400	440	510	660	860	1060			
	-	-	-	-	100			
4600	480	560	730	950	1180			
	-	-	-	-	N/A			
4800	530	620	800	1040				
	-	-	-	N/A				
5000	580	670	880	1150				
	-	-	-	N/A				
5200	630	730	960					
	-	-	100					
5400	680	800	1040					
	-	-	N/A					
5600	740	870	1140					
	-	100	N/A					
5800	800	940						
	-	60	N/A					

End Spans 180mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	260	260	330	410	490	670	870	1070
	-	-	-	-	-	-	-	-
3400	260	290	370	460	560	770	990	1230
	-	-	-	-	-	-	-	- 100
3600	280	330	410	520	630	870	1130	1410
	-	-	-	-	-	-	-	- N/A
3800	320	360	460	580	710	990	1280	
	-	-	-	-	-	-	N/A	
4000	350	400	510	650	800	1110	1450	
	-	-	-	-	-	-	N/A	
4200	390	440	570	720	890	1240		
	-	-	-	-	-	110		
4400	420	490	620	800	990	1390		
	-	-	-	-	-	N/A		
4600	460	540	690	880	1090			
	-	-	-	-	-			
4800	510	590	750	970	1210			
	-	-	-	-	210			
5000	550	640	820	1070	1330			
	-	-	-	-	N/A			
5200	600	700	900	1170				
	-	-	-	N/A				
5400	650	760	980	1280				
	-	-	-	N/A				
5600	700	820	1060					
	-	-	150					

END SPAN DESIGN TABLES POWERDEK™ 120

End Spans 190mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	250	250	310	390	470	630	810	990
3400	250	280	350	440	530	720	920	1130
3600	270	310	390	490	600	820	1050	1300
3800	300	350	440	550	670	920	1190	1480
4000	340	390	490	620	750	1030	1340	90
4200	370	430	540	680	830	1160	1510	
4400	410	470	590	760	920	1290	220	
4600	450	510	650	830	1020	1430	180	
4800	490	560	710	910	1120	1590	N/A	
5000	530	610	780	1000	1240			
5200	570	660	850	1090	1350	200		
5400	620	720	920	1190	1480	N/A		

End Spans 200mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	260	260	300	370	450	600	760	920
3400	260	270	340	420	500	680	860	1060
3600	270	300	380	470	570	770	980	1200
3800	300	340	420	520	630	860	1110	1370
4000	330	370	470	580	710	970	1250	1540
4200	360	410	510	650	790	1080	1400	
4400	400	450	570	720	870	1200	1560	70
4600	430	490	620	790	960	1330		
4800	470	540	680	860	1060	1470	30	
5000	510	590	740	950	1160	1620	250	
5200	550	640	810	1030	1270			
5400	600	690	880	1120	1380	30		

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END SPAN DESIGN TABLES POWERDEK™ 120

End Spans 225mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	300	300	300	340	400	530	660	800
	- -	- -	- -	- -	- -	- -	- -	- -
3400	300	300	310	380	450	600	750	910
	- -	- -	- -	- -	- -	- -	- -	- -
3600	300	300	350	430	510	670	850	1030
	- -	- -	- -	- -	- -	- -	- -	- -
3800	300	310	390	480	570	760	960	1170
	- -	- -	- -	- -	- -	- -	- -	- -
4000	310	350	430	530	630	850	1070	1310
	- -	- -	- -	- -	- -	- -	- -	- -
4200	340	380	470	580	700	940	1190	1460
	- -	- -	- -	- -	- -	- -	- -	- -
4400	370	420	520	640	770	1040	1330	
	- -	- -	- -	- -	- -	- -	- -	
4600	400	460	560	700	850	1150	1470	
	- -	- -	- -	- -	- -	- -	- -	
4800	440	500	610	770	930	1260	1620	
	- -	- -	- -	- -	- -	- -	- -	
5000	480	540	670	840	1010	1380		
	- -	- -	- -	- -	- -	- -		
5200	520	580	730	910	1110	1520		
	- -	- -	- -	- -	- -	- -		

End Spans 250mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	330	330	330	330	370	480	600	710
	- -	- -	- -	- -	- -	- -	- -	- -
3400	330	330	330	350	410	540	670	810
	- -	- -	- -	- -	- -	- -	- -	- -
3600	330	330	330	390	470	610	760	910
	- -	- -	- -	- -	- -	- -	- -	- -
3800	330	330	360	440	520	680	850	1030
	- -	- -	- -	- -	- -	- -	- -	- -
4000	330	330	400	490	570	760	950	1150
	- -	- -	- -	- -	- -	- -	- -	- -
4200	330	360	440	530	630	840	1050	1280
	- -	- -	- -	- -	- -	- -	- -	- -
4400	350	390	480	590	690	930	1170	1420
	- -	- -	- -	- -	- -	- -	- -	- -
4600	380	430	520	640	760	1020	1290	1570
	- -	- -	- -	- -	- -	- -	- -	- -
4800	420	470	570	700	830	1120	1420	
	- -	- -	- -	- -	- -	- -	- -	
5000	450	510	620	760	910	1220	1550	
	- -	- -	- -	- -	- -	- -	- -	

Interior Spans 150 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	320	320	320	390	490	690	900	1130
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A
3200	320	320	340	450	560	790	1050	1330
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A
3400	320	320	390	510	640	910	1210	
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	
3600	320	330	440	580	720	1040	1400	
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	
3800	320	370	490	650	820	1190		
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A		
4000	350	410	550	730	920	1350		
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A		
4200	380	460	610	810	1030			
	- N/A	- N/A	- N/A	- N/A	- N/A			
4400	420	500	680	910	1160			
	- N/A	- N/A	- N/A	- N/A	- N/A			
4600	470	560	750	1010	1300			
	- N/A	- N/A	- N/A	- N/A	- N/A			
4800	510	610	830	1120				
	- N/A	- N/A	- N/A	- N/A				
5000	560	670	910	1240				
	- N/A	- N/A	- N/A	- N/A				
5200	610	730	990					
	- N/A	- N/A	- N/A					

Interior Spans 160 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	300	300	300	370	450	630	820	1020
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A
3200	300	300	320	420	520	730	950	1190
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A
3400	300	300	360	470	590	830	1090	1380
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A
3600	300	310	410	530	670	950	1250	
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	
3800	300	350	460	600	750	1070	1440	
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A	
4000	330	390	510	670	840	1210		
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A		
4200	360	430	570	750	940	1370		
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A		
4400	400	480	630	830	1050	1550		
	- N/A	- N/A	- N/A	- N/A	- N/A	- N/A		
4600	440	520	700	920	1170			
	- N/A	- N/A	- N/A	- N/A	- N/A			
4800	480	570	760	1020	1300			
	- N/A	- N/A	- N/A	- N/A	- N/A			
5000	530	630	840	1120	1440			
	- N/A	- N/A	- N/A	- N/A	- N/A			

INTERIOR SPAN DESIGN TABLES POWERDEK™ 100

Interior Spans 170 mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	280	280	280	350	420	580	750	930
3200	280	280	310	390	480	670	870	1080
3400	280	280	350	440	550	770	1000	1250
3600	280	300	390	500	620	870	1140	1430
3800	290	330	430	560	700	980	1300	1650
4000	320	370	480	630	780	1110	1470	20
4200	350	410	530	700	870	1240	1670	
4400	380	450	590	770	970	1390	110	
4600	420	490	650	850	1070	1560	50	
4800	460	540	710	940	1180	1740	390	
5000	500	590	780	1030	1310			

Interior Spans 180 mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	260	260	260	330	400	540	700	860
3200	260	260	290	370	450	620	800	990
3400	260	260	330	420	510	710	920	1140
3600	260	290	370	470	580	810	1050	1310
3800	280	320	410	530	650	910	1190	1490
4000	300	350	450	590	730	1020	1340	1700
4200	340	390	500	650	810	1140	1510	30
4400	370	430	560	720	900	1280	1700	
4600	400	470	610	800	990	1420		
4800	440	510	670	880	1100	1580		
5000	480	560	730	960	1200	1750		

INTERIOR SPAN DESIGN TABLES POWERDEK™ 100

Interior Spans 190 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	250	250	250	310	380	510	650	800
3200	250	250	280	350	430	590	750	920
3400	250	250	310	400	480	670	860	1060
3600	250	280	350	450	550	750	970	1210
3800	270	310	390	500	610	850	1100	1370
4000	290	340	430	560	680	950	1240	1550
4200	330	380	480	620	760	1060	1390	1750
4400	360	410	530	680	840	1180	1560	1980
4600	390	450	580	750	930	1310	1740	
4800	420	490	640	820	1020	1450	1940	

Interior Spans 200 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	260	260	260	300	360	480	610	750
3200	260	260	270	340	410	550	710	860
3400	260	260	300	380	460	630	800	990
3600	260	270	340	430	520	710	910	1120
3800	260	300	380	480	580	800	1030	1270
4000	280	330	420	530	650	890	1150	1430
4200	310	360	460	590	720	1000	1290	1610
4400	340	400	510	650	790	1100	1440	1810
4600	380	440	550	710	880	1220	1600	2030
4800	410	470	610	780	960	1350	1780	

INTERIOR SPAN DESIGN TABLES POWERDEK™ 100

Interior Spans 225 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	300	300	300	300	320	430	540	650
3200	300	300	300	310	370	490	620	750
3400	300	300	300	350	420	550	700	850
3600	300	300	310	390	470	620	790	960
3800	300	300	340	430	520	700	890	1090
4000	300	300	380	480	570	780	990	1220
4200	300	340	420	530	630	870	1110	1360
4400	320	370	460	580	700	960	1230	1510
4600	350	400	500	630	770	1050	1360	1680

Interior Spans 250 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3000	330	330	330	330	330	390	490	580
3200	330	330	330	330	340	450	560	660
3400	330	330	330	330	380	500	630	750
3600	330	330	330	360	420	560	700	850
3800	330	330	330	400	470	630	790	960
4000	330	330	350	440	520	700	880	1070
4200	330	330	390	480	580	770	980	1190
4400	330	340	430	530	630	850	1080	1320

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INTERIOR SPAN DESIGN TABLES POWERDEK™ 120

Interior Spans 170mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	280	280	310	390	480	670	870	1080
3400	280	280	350	440	550	770	1000	1250
3600	280	300	390	500	620	870	1140	1440
3800	290	340	430	560	700	980	1300	
4000	320	370	480	630	780	1110	1470	
4200	350	410	540	700	870	1250		
4400	390	450	590	780	970	1390		
4600	420	500	650	860	1070			
4800	460	540	710	940	1190			
5000	500	590	780	1030	1310			
5200	540	640	850	1130	1440			
5400	590	700	930	1240				
5600	640	760	1010	1350				
5800	690	820	1090					

Interior Spans 180 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	260	260	290	370	450	630	810	1000
3400	260	260	330	420	510	710	920	1140
3600	260	290	370	470	580	810	1050	1310
3800	280	320	410	530	650	910	1190	1490
4000	310	360	460	590	730	1020	1340	
4200	340	390	510	660	810	1150	1510	
4400	370	430	560	730	900	1280		
4600	400	470	610	800	990	1420		
4800	440	510	670	880	1100	1580		
5000	480	560	730	960	1210			
5200	520	610	800	1050	1320			
5400	560	660	870	1150	1450			
5600	610	720	940	1250	1590			

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INTERIOR SPAN DESIGN TABLES POWERDEK™ 120

Interior Spans 190 mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	250	250	280	360	430	590	750	920
	-	-	-	-	-	-	-	-
3400	250	250	320	400	490	670	860	1060
	-	-	-	-	-	-	-	-
3600	250	280	350	450	550	760	970	1210
	-	-	-	-	-	-	-	-
3800	270	310	390	500	610	850	1100	1370
	-	-	-	-	-	-	-	-
4000	300	340	440	560	690	950	1240	
	-	-	-	-	-	-	-	-
4200	330	380	480	620	760	1060	1390	
	-	-	-	-	-	-	-	-
4400	360	410	530	680	840	1180	1560	
	-	-	-	-	-	-	-	-
4600	390	450	580	750	930	1310		
	-	-	-	-	-	-	-	-
4800	420	490	640	830	1020	1450		
	-	-	-	-	-	-	-	-
5000	460	540	690	900	1120	1600		
	-	-	-	-	-	-	-	-
5200	500	580	760	990	1230	1770		
	-	-	-	-	-	-	-	-
5400	540	630	820	1070	1340			
	-	-	-	-	-	-	-	-

Interior Spans 200 mm slab								
Span (mm)	Characteristic Imposed Load Q_k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	260	260	270	340	410	550	710	860
	-	-	-	-	-	-	-	-
3400	260	260	300	380	460	630	800	990
	-	-	-	-	-	-	-	-
3600	260	270	340	430	520	710	910	1120
	-	-	-	-	-	-	-	-
3800	260	300	380	480	580	800	1030	1270
	-	-	-	-	-	-	-	-
4000	290	330	420	530	650	890	1160	1430
	-	-	-	-	-	-	-	-
4200	320	360	460	590	720	1000	1290	
	-	-	-	-	-	-	-	-
4400	350	400	510	650	800	1110	1440	
	-	-	-	-	-	-	-	-
4600	380	440	550	710	880	1220	1600	
	-	-	-	-	-	-	-	-
4800	410	470	610	780	960	1350		
	-	-	-	-	-	-	-	-
5000	440	510	660	850	1050	1490		
	-	-	-	-	-	-	-	-
5200	480	560	720	930	1150	1630		
	-	-	-	-	-	-	-	-
5400	520	600	780	1010	1250	1790		
	-	-	-	-	-	-	-	-

INTERIOR SPAN DESIGN TABLES

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Interior Spans 225 mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	300	300	300	310	370	490	620	750
3400	300	300	300	350	420	550	700	850
3600	300	300	310	390	470	620	790	960
3800	300	300	350	430	520	700	890	1090
4000	300	310	380	480	580	780	990	1220
4200	300	340	420	530	640	870	1110	1360
4400	320	370	460	580	700	960	1230	1520
4600	350	400	500	630	770	1060	1360	
4800	380	440	550	690	840	1160	1500	
5000	410	470	590	760	920	1270	1650	
5200	450	510	650	820	1000	1390		

Interior Spans 250mm slab								
Span (mm)	Characteristic Imposed Load Q _k (kPa)							
	2	3	5	7.5	10	15	20	25
3200	330	330	330	330	340	450	560	660
3400	330	330	330	330	380	500	630	750
3600	330	330	330	360	430	560	700	850
3800	330	330	330	400	470	630	790	960
4000	330	330	350	440	520	700	880	1070
4200	330	330	390	480	580	770	980	1190
4400	330	340	430	530	630	850	1080	1320
4600	330	380	470	580	690	940	1190	1460
4800	360	410	510	630	760	1030	1310	1610
5000	390	440	550	680	830	1120	1430	

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