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KOFORMDEK

高鋼迪

Design To BS 5950-4/6

金屬模板 屋面鋼承板

Metal Decking & Roof Decking

建築金屬 圍護系統服務

SOLUTION Provider of Metal Building Envelope

2022

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KOFORMDEK
高鋼迪

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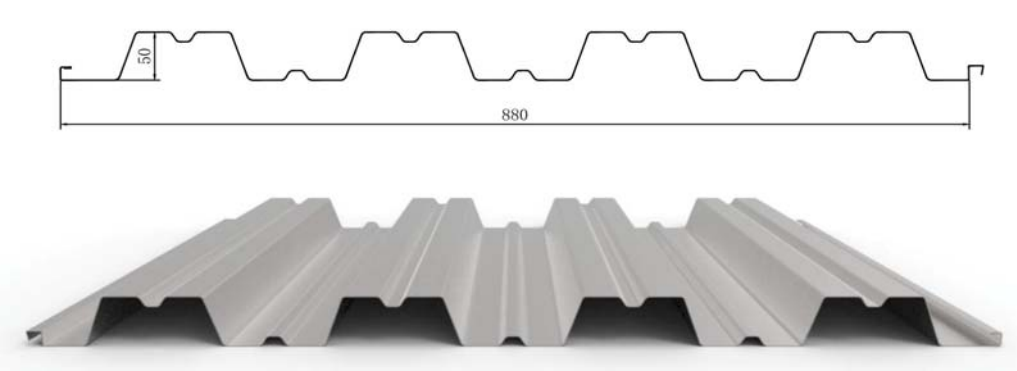
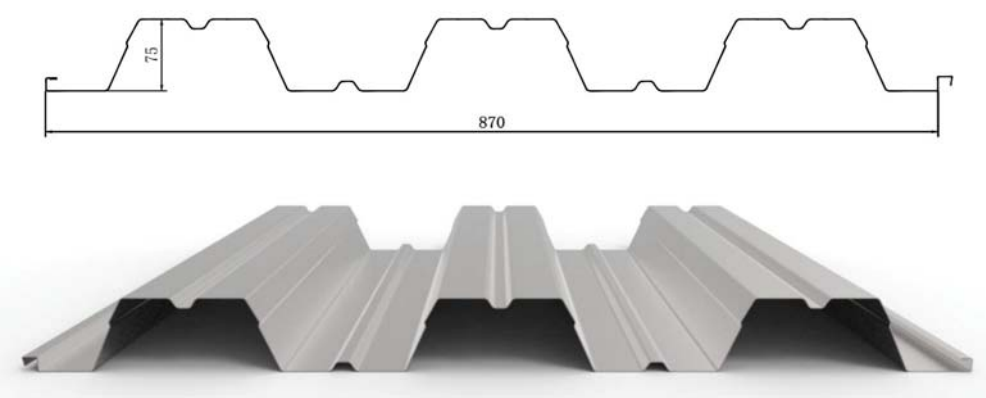
產品簡介
1 . Products

KOFORMDEK 高鋼迪常用規格:
KOFORMDEK Standard Specifications:



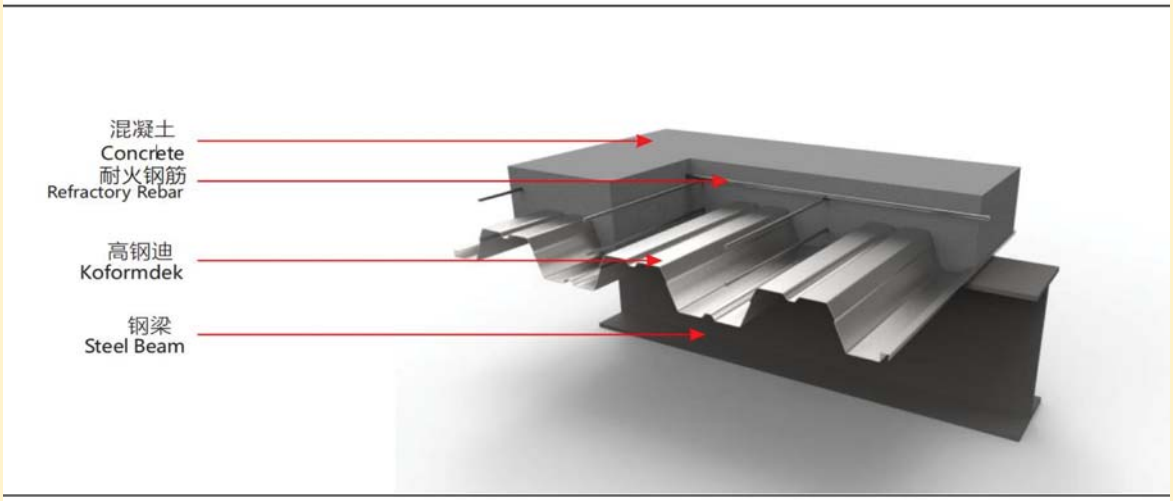


厚度 Thickness	鍍層 Coating	材質 Grade	塗層 Colour - Optional
0.75 / 1.0 / 1.2	Z 275 / Z 350	G550	輥塗 PE Coating
1.5	Z 275 / Z 350	G450	

作爲金屬模板(樓承板)系統 Being Metal Decking System

KOFORMDEK 高鋼迪採用開口式的高板肋設計，高強承載力，強度比傳統的木模板更高，存儲壓型鋼承板較少會發生火災的機會。在短時間提供的工作平台，無需拆模，無需臨時支撐，可以多層面同時施工。產品獨特的搭接方式，確保混凝土不漏漿。新穎美觀的防滑花紋設計，與混凝土的結合更好。產品設計符合: GB、BS、EN、ASTM標準。

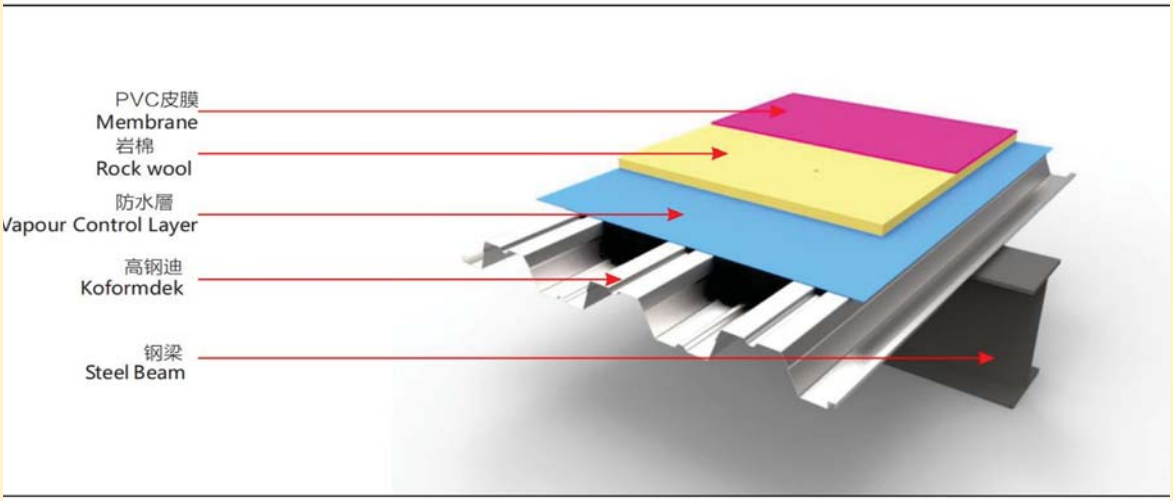
KOFORMDEK Metal deck plate adopts open high rib design, high strength bearing capacity, higher strength than traditional wood formwork, and there is less chance of fire when storing pressed steel plate. The working platform provided in a short period of time does not require demoulding or temporary support, and can be constructed at multiple levels at the same time. The unique lap joint method of the product ensures that the concrete does not leak. Novel and beautiful anti-skid pattern design, better combination with concrete. Product design conforms to: GB, BS, EN, ASTM standards.



作爲屋面/天花系統 Being Roofing / Ceiling System

KOFORMDEK 高鋼迪鋼承板能應用於金屬屋面系統,可以減少結構支撐，增大室內使用空間，同時加快施工進度；鋼承板的塗層烤漆面可直接作爲室內天花，省去天花吊頂；在鋼承板面加上保溫岩棉和防水膜層,能組合成結構性能優異的屋面系統。

KOFORMDEK steel deck can be applied to metal roofing systems, which can reduce structural support, increase indoor space, and speed up construction progress;The painted surface of the steel deck can be directly used as an indoor ceiling, eliminating the need for a ceiling; adding thermal insulation rock wool and a waterproof membrane layer on the steel deck can be combined into a roof system with excellent structural performance.



設計說明
2． Design

2.1 作爲金屬模板(樓承板)系統 Being Metal Decking System

◆、壓型鋼承板的設計是遵照英標BS5950：第6章：1995年“輕型壓型鋼承板設計實用規範”。
The design of the profiled steel decking is in accordance with BS5950:Part6:1995 ‘Code of practice for design of light gauge profiled steel sheeting’.

◆、複合樓板設計是遵照英標BS5950：第四章：1994年“壓型鋼承板複合樓板設計實用規範”。
The design of the composite slabs with profiled steel decking is in accordance with BS5950:Part4:1994 ‘Code of practice for design of composite slabs with profiled steel sheeting’.

◆、壓型鋼承板截面性質和截面能力的測定均遵照英標BS5950：第6章。
Section properties and determining the ability of pressure sectional steel carrier plate are in accordance with the British Standard BS5950: Chapter 6.

◆、在複合樓板的施工階段和被加強的混凝土板的凝固過程中壓型鋼樓板的設計荷載在有關荷載系數的設計荷載表中有介紹。
During the construction and concreting of reinforce concrete slabs, the design loads of the profiled steel decking are presented in Design Load Table with appropriate load factors.

◆、在計算壓型鋼承板的截面特性時需考慮以下兩個方面：
In calculating the pressure bearing plate steel section properties, two aspects should be considered:
A. 壓力作用下翼緣的縱向彎曲以及彎曲作用下腹板的變形。
Under pressure flange buckling and bending deformation in webs.
B. 壓型鋼承板在上撓彎矩作用下的塑性變形。
Pressure steel plate bearing on the flexible plastic deformation at the moment.

◆、對於單、雙和三跨的彎矩和剪力的設計值是根據已有的設計條件來計算的。對於在不同支撐下的變形係數也因此而得。
The design values of bending moment and shear forces for single span, double span and triple span are calculated in accordance with design information presented. The deflection coefficients for different support conditions are also employed accordingly.

◆、壓型鋼承板的模板跨距表是根據以下條件設計
彎矩抵抗模量、腹板抗剪能力、腹板抗壓模量、彎矩與壓力的複合作用、彎矩與剪力的複合作用、變形在樓板的施工階段及混凝土的凝結階段。
鋼承板段部支撐長度的最小值爲50mm。
The Formwork Load Span Table presented for profiled steel decking are designed against
Moment resistance; Web shear capacity; Web crushing resistance; Combined bending and Web crushing; Combined bending and shear; and Deflection during the construction stage of composite slabs and also during the concreting of reinforced concrete slabs.
The minimum bearing length of end supports or end bearing is 50mm.

◆、壓型鋼承板的一般應用標準節點圖也在技術手冊《鋼承板跨度表》中介紹。
Typical details for common application of profiled steel decking are presented in technical manual Koformdek Formwork Load Span Tables.

設計說明
2． Design

2.2 作爲屋面/天花系統 Being Roofing / Ceiling System

◆、屋面壓型鋼板是根據英標BS5950：第6章：1995年“薄壁壓型鋼板的設計實行規範”。
The design of the profiled steel roof decking is in accordance with BS 5950:Part 6:1995 "Code of practice for design of light gauge profiled steel sheeting".

◆、壓型鋼承板的模板跨距表是根據以下條件設計
彎矩抵抗模量、腹板抗剪能力、腹板抗壓模量、彎矩與壓力的複合作用、彎矩與剪力的複合作用、變形在樓板的施工階段及混凝土的凝結階段。
The Formwork Load Span Table presented for profiled steel decking are designed against
Moment resistance; Web shear capacity; Web crushing resistance; Combined bending and Web crushing;
Combined bending and shear; and Deflection during the construction stage of composite slabs and also during the concreting of reinforced concrete slabs.

◆、屋面壓型鋼底板的橫截面的幾何形狀及材料已在之前的表格中有說明。
The cross section geometry and the material specifications of the profiled steel roof decking are presented.

◆、對於單、雙和三跨的彎矩和剪力的設計值是根據已有的設計條件來計算的。對於在不同支撐下的變形係數也因此而得。
The design values of bending moment and shear forces for single span, double span and triple span are calculated in accordance with design information. The deflection coefficients for different support conditions are also employed accordingly.

◆、在計算壓型鋼底板的截面特性時需考慮以下兩個方面：
In calculating the pressure bearing plate steel section properties, two aspects should be considered:
A. 壓力作用下翼緣的縱向彎曲以及彎曲作用下腹板的變形。
Under pressure flange buckling and bending deformation in webs.
B. 壓型鋼承板在上撓彎矩作用下的塑性變形。
Pressure steel plate bearing on the flexible plastic deformation at the moment.

◆、在每個波峯上至少打一顆螺釘，螺釘的連接力批Pt英標BS5950：第5章:1998年：附錄A中的條款A.1.5，螺釘的極限抗拉力Pft的最小值爲8.4kN，該力使用了系數3。每顆螺釘的連接抗拉力Pft最大值爲2.8kN。螺釘連接中的拉斷與拉脫都已考慮。螺釘和螺帽的最小直徑分別爲4.83mm和10mm，而支撐板或檁條的最小厚度爲1.0mm。

In every rib, one screw is provided as minimum, and the tensile capacity of the screw connection, Pt, is calculated in accordance with clause A.1.5 of Appendix A:BS5950:Part:5:1998.The minimum tensile capacity of the screw, Pft, is 8.4kN(ultimate), and a factor of 3 is used; the maximum tensile capacity of each screwed connection .Pft , is 2.8kN,Both pulling-over and pulling-out of the screwed connections have also been considered. The minimum diameter of the screws and the washers are 4.83mm and 10mm respectively while the minimum thickness of supporting sheetings or purlin sections is 1.0mm.

3. 設計材料 Materials

高鋼迪 KOFORMDEK	鋼板厚度 (mm) Metal thickness	屈服強度 Yield Strength Py(N/mm²)	鍍層 Coating	可選配 Optional
				鍍層 Coating / 烤漆 Paint
50—880 75—870	0.75 1.0 1.2	G450 G550	AZ185 Z275	AZ185 / PE Z275 / SMP / PVDF
	1.5	G450	Z275 Z350	

4. 設計荷載 Design Load

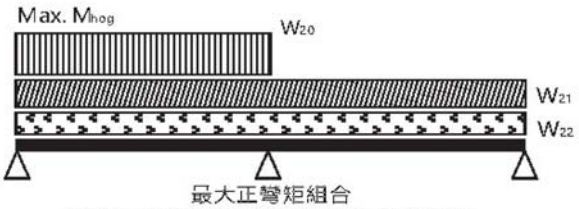
4.1 施工階段的極限承載狀況和正常承載狀況 Construction stage——Ultimate limit state and Serviceability limit

類型Type	荷載系数 Load Factor	设计值 Design value	
施工荷載 Construction load	1.0(min) 1.6(max)	最小 Minimum	1.5 kN/m
		If Lp <3m (Lp is the span of decking)	4.5/Lp kN/m²
		最大 Maximum	3.0 kN/m ²
堆压荷載 Storage load	1.0(min) 1.6(max)		3.0 kN/m ²
恒荷載 Dead load	1.0(min) 1.4(max)	钢筋混凝土自重 Self weight of concrete	24.0 kN/m^3
		钢承板自重 Self weight of decking	78.5 kN/m^3

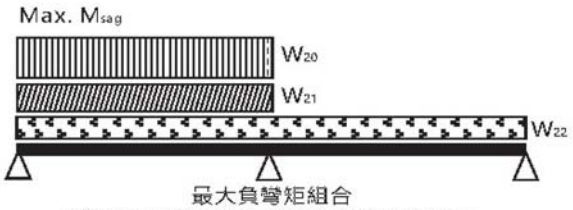
4.2 鋼承屋面板設計荷載 Design loads for roof decking

類型Type	荷載系数 Load Factor	设计值 Design value
風荷載 Wind load	1.4(max)	Code of practice wind effects in Hong Kong 2004:1.82kPa minimum
活荷載 Imposedload	1.6(max)	A concentrated load of 0.75kN (as an equivalent lin load of 0.75kN/m),O r a UDL of 0.75kN/m
施工荷載 Construction load	1.6(max)	A concentrated load of 0.75kN (as an equivalent lin load of 0.75kN/m)

設計系數
5 . Design Factor

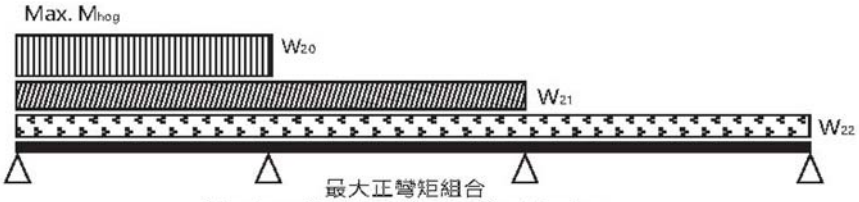


最大正彎矩組合
Maximum Positive Moment Combination



最大負彎矩組合
Maximum Negative Moment Combination

最大正彎矩 Max.M_{sag}= $0.096W_{20}+0.096W_{21}+0.070W_{22}$
最大負彎矩 Max.M_{hog}= $0.063W_{20}+0.125W_{21}+0.125W_{22}$
最大剪力 Max.V = $0.562W_{20}+0.625W_{21}+0.625W_{22}$
最大支座反力 Max.R = $0.625W_{20}+1.250W_{21}+1.250W_{22}$

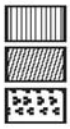


最大正彎矩組合
Maximum Positive Moment Combination

最大負彎矩組合
Maximum Negative Moment Combination

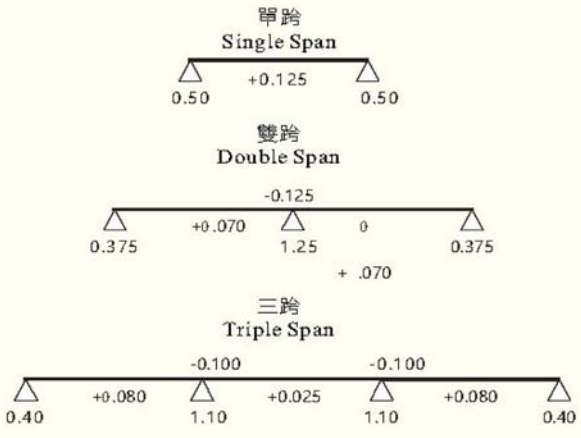
最大正彎矩 Max.M_{sag}= $0.094W_{20}+0.094W_{21}+0.080W_{22}$
最大負彎矩 Max.M_{hog}= $0.067W_{20}+0.117W_{21}+0.100W_{22}$
最大剪力 Max.V = $0.567W_{20}+0.617W_{21}+0.600W_{22}$
最大支座反力 Max.R = $0.650W_{20}+1.200W_{21}+1.100W_{22}$

注釋 Notes:

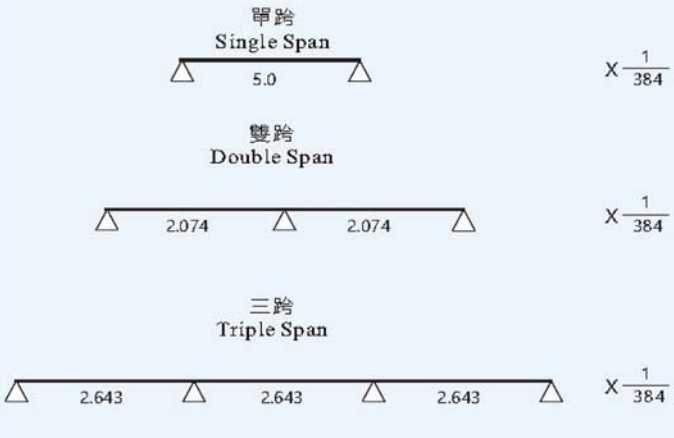


W_{20} = 1.6 x 2/3 LL_{Const}
W_{21} = 1.4 DL_{conc} + 1.6 x 1/3 LL_{Const}
W_{22} = 1.4 DL_{deck}

彎矩與支座反力系數
Bending Moment And Shear Force Coefficients



撓度係數
Deflection Coefficients



6 . 1 KOFORMDEK 50-880 截面特性 KOFORMDEK 50-880 Section Properties

Metal thickness (mm)	Weight (kg/m^2)	設計強度 Design strength Py	抗彎矩能力 moment capacity Mxr (kNm/m)	次彎矩面積 Second moment of area		
				Ix (cm4/m)	Ixr (cm4/m)	Iav (cm4/m)
0.75	8.03	(G450) G550	4.86	46.00	33.48	39.74
1.0	10.70		7.38	61.34	48.64	54.99
1.2	12.85		9.73	73.60	61.78	67.69
1.5	16.04	G450	13.82	92.00	82.83	87.42

6 . 2 KOFORMDEK 高鋼迪50-880最大無支撐跨度表 Table of Maximum Unshored Deck Spans

Slab Depth (mm)	鋼板厚度 Thickness (mm)	Maximum Unshored Span		
		單跨 Single Span	雙跨 Double Span	三跨 Trile Span
100	0.75	2690	2760	3055
	1	3055	3595	3745
	1,20	3255	4195	3975
150	0.75	2260	2170	2425
	1	2660	2960	3250
	1,20	2840	3475	3490
200	0.75	1995	1825	2045
	1	2410	2500	2790
	1,20	2575	3015	3175
250	0.75	1810	1595	1785
	1	2235	2190	2450
	1,20	2390	2650	2950

Bearing Length=100mm

以上表中數據基於以下條件：
The above and below spans tables is based on following criteria

1 . 混凝土比重爲2400kg/m^3
Unit weight of concrete 2400kg/m^3
2 . 施工時均布荷載：1kN/m^2
Construction uniform load 1kN/m^2
3 . 撓度控制爲：L/200與20mm的較小值
Deflflection is limited to minimum of L/200 and 20mm

6.3 高鋼迪50-880荷載與跨度使用表 KOFORMDEK 50-880 Load Span Table

t=0.75mm	Limit State		Span							
			2500	3000	3500	4000	4500	5000	5500	6000
Single span	Ultimate-factored load	One screw per trough	6.22	4.31	3.17	2.43	1.92	1.55	1.28	-/-
		Two screws per trough	6.22	4.31	3.17	2.43	1.92	1.55	1.28	-/-
	Serviceability-unfactored load	Deflection limit=span/200	1.69	0.98	0.61	0.41	0.29	0.21	0.16	-/-
		Deflection limit=span/90	3.75	2.17	1.37	0.92	0.64	0.47	0.35	-/-
End span	Ultimate-factored load	One screw per trough	3.33	2.77	2.38	2.08	1.85	1.55	1.28	-/-
		Two screws per trough	6.16	4.29	3.15	2.42	1.91	1.55	1.28	-/-
	Serviceability-unfactored load	Deflection limit=span/200	3.18	1.84	1.16	0.78	0.55	0.40	0.30	-/-
		Deflection limit=span/90	7.07	4.09	2.58	1.73	1.21	0.88	0.66	-/-
Internal span	Ultimate-factored load	One screw per trough	3.20	2.67	2.28	2.00	1.78	1.60	1.45	1.27
		Two screws per trough	6.41	5.04	3.71	2.85	2.25	1.82	1.51	1.27
	Serviceability-unfactored load	Deflection limit=span/200	8.43	4.88	3.07	2.06	1.45	1.05	0.79	0.61
		Deflection limit=span/90	15.00	10.85	6.83	4.58	3.21	2.34	1.76	1.36

t=1.0 mm	Limit State		Span							
			2500	3000	3500	4000	4500	5000	5500	6000
Single span	Ultimate-factored load	One screw per trough	8.33	6.55	4.81	3.69	2.91	2.36	1.95	1.64
		Two screws per trough	9.44	6.55	4.81	3.69	2.91	2.36	1.95	1.64
	Serviceability-unfactored load	Deflection limit=span/200	2.45	1.42	0.89	0.60	0.42	0.31	0.23	0.18
		Deflection limit=span/90	5.45	3.15	1.98	1.33	0.93	0.68	0.51	0.39
End span	Ultimate-factored load	One screw per trough	3.33	2.77	2.38	2.08	1.85	1.66	1.51	1.38
		Two screws per trough	6.66	5.55	4.76	3.68	2.90	2.35	1.94	1.63
	Serviceability-unfactored load	Deflection limit=span/200	4.62	2.68	1.68	1.13	0.79	0.58	0.43	0.33
		Deflection limit=span/90	10.27	5.59	3.74	2.51	1.76	1.28	0.96	0.74
Internal span	Ultimate-factored load	One screw per trough	3.20	2.67	2.28	2.00	1.78	1.60	1.45	1.33
		Two screws per trough	6.41	5.34	4.57	4.00	3.42	2.77	3.39	1.93
	Serviceability-unfactored load	Deflection limit=span/200	12.25	7.09	4.47	2.99	2.10	1.53	1.15	0.89
		Deflection limit=span/90	15.00	15.00	9.92	6.65	4.67	3.40	2.56	1.97

t=1.2 mm	Limit State		Span							
			2500	3000	3500	4000	4500	5000	5500	6000
Single span	Ultimate-factored load	One screw per trough	8.33	6.94	5.95	4.68	3.70	2.99	2.47	2.08
		Two screws per trough	11.99	8.32	6.11	4.68	3.70	2.77	2.47	2.08
	Serviceability-unfactored load	Deflection limit=span/200	3.11	1.80	1.13	0.76	0.53	0.39	0.29	0.23
		Deflection limit=span/90	6.92	4.00	2.52	1.69	1.19	0.86	0.65	0.50
End span	Ultimate-factored load	One screw per trough	3.33	2.77	2.38	2.08	1.85	1.66	1.51	1.38
		Two screws per trough	6.66	5.55	4.76	4.16	3.69	2.99	2.47	2.08
	Serviceability-unfactored load	Deflection limit=span/200	5.87	3.40	2.14	1.43	1.01	0.73	0.55	0.42
		Deflection limit=span/90	13.05	7.55	4.76	3.19	2.24	1.63	1.23	0.94
Internal span	Ultimate-factored load	One screw per trough	3.20	3.67	2.28	2.00	1.78	1.60	1.45	1.33
		Two screws per trough	6.41	5.34	4.57	4.00	3.56	3.20	2.91	2.45
	Serviceability-unfactored load	Deflection limit=span/200	15.00	9.01	5.67	3.80	2.67	1.95	1.46	1.13
		Deflection limit=span/90	15.00	15.00	12.60	8.44	5.93	4.32	3.25	2.50

Notes:Py=550N/mm ,Bearing length=60mm,Unit=kPa

6 . 4 高鋼迪 75-870 截面特性 KOFORMDEK 75-870 Section Properties

Metal thickness (mm)	Weight (kg/m^2)	設計強度 Design strength Py	抗彎矩能力 moment capacity Mxr (kNm/m)	次彎矩面積 Second moment of area		
				Ix (cm4/m)	Ixr (cm4/m)	Iav (cm4/m)
0.75	8.12	(G450) G550	5.56	104.59	70.16	87.38
1.0	10.83		9.82	139.46	105.23	122.34
1.2	12.99		13.61	167.35	132.78	150.06
1.5	12.99	G450	18.84	209.18	177.04	193.11

6 . 5 高鋼迪 75-870 最大無支撐跨度表 KOFORMDEK Table of Maximum Unshored Deck Spans

Slab Depth (mm)	鋼板厚度 Thickness (mm)	Maximum Unshored Span		
		單跨 Single Span	雙跨 Double Span	三跨 Trile Span
100	0.75	3005	2990	3245
	1	3980	4115	4460
	1,20	4280	4945	5020
150	0.75	2560	2235	2505
	1	3505	3295	3610
	1,20	3375	3980	4365
200	0.75	2230	1825	2050
	1	3110	2750	3070
	1,20	3410	3385	3730
250	0.75	2010	1560	1755
	1	2800	2360	2650
	1,20	3155	2965	3285

Bearing Length=100mm

以上表中數據基於以下條件：
The above and below spans tables is based on following criteria

1 . 混凝土比重爲2400kg/m^3
Unit weight of concrete 2400kg/m^3
2 . 施工時均布荷載：1kN/m^2
Construction uniform load 1kN/m^2
3 . 撓度控制爲：L/200與20mm的較小值
Deflflection is limited to minimum of L/200 and 20mm

6.6 高鋼迪75-870荷載與跨度使用表 KOFORMDEK 75-870 Load Span Table

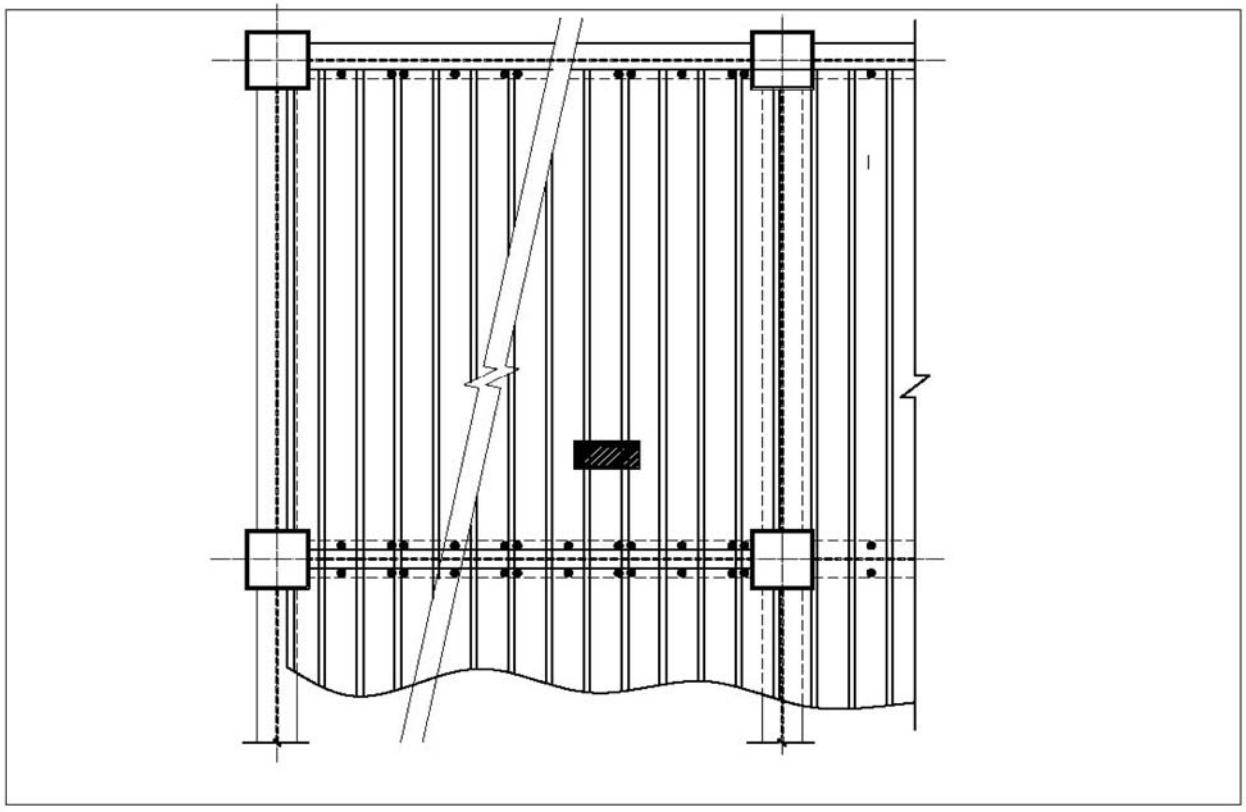
t=0.75mm	Limit State		Span							
			2500	3000	3500	4000	4500	5000	5500	6000
Single span	Ultimate-factored load	One screw per trough	7.11	4.94	3.63	2.78	2.19	1.77	1.47	1.23
		Two screws per trough	7.11	4.94	3.63	2.78	2.19	1.77	1.47	1.23
	Serviceability-unfactored load	Deflection limit=span/200	3.53	2.05	1.29	0.86	0.61	0.44	0.33	0.26
		Deflection limit=span/90	7.85	4.55	2.86	1.92	1.35	0.98	0.74	0.57
End span	Ultimate-factored load	One screw per trough	4.96	4.13	3.54	2.76	2.18	1.77	1.46	1.23
		Two screws per trough	7.03	4.90	3.61	2.76	2.18	1.77	1.46	1.23
	Serviceability-unfactored load	Deflection limit=span/200	6.67	3.86	2.43	1.63	1.14	0.83	0.63	0.48
		Deflection limit=span/90	14.82	8.58	5.40	3.62	2.54	1.85	1.39	1.07
Internal span	Ultimate-factored load	One screw per trough	4.76	3.97	3.40	2.98	2.57	2.08	1.72	1.45
		Two screws per trough	8.25	5.76	4.24	3.25	2.57	2.08	1.72	1.45
	Serviceability-unfactored load	Deflection limit=span/200	15.00	10.23	6.44	4.31	3.03	2.21	1.66	1.28
		Deflection limit=span/90	15.00	15.00	14.31	9.59	6.73	4.91	3.69	2.84

t=1.0 mm	Limit State		Span							
			2500	3000	3500	4000	4500	5000	5500	6000
Single span	Ultimate-factored load	One screw per trough	12.40	8.72	6.41	4.90	3.87	3.14	2.59	2.18
		Two screws per trough	12.56	8.72	6.41	4.90	3.87	3.14	2.59	2.18
	Serviceability-unfactored load	Deflection limit=span/200	5.30	3.07	1.93	1.29	0.91	0.66	0.50	0.38
		Deflection limit=span/90	11.78	6.82	4.29	2.88	2.02	1.47	1.11	0.85
End span	Ultimate-factored load	One screw per trough	4.96	4.13	3.54	3.10	2.75	2.48	2.25	2.06
		Two screws per trough	9.92	8.26	6.39	4.89	3.87	3.13	2.59	2.17
	Serviceability-unfactored load	Deflection limit=span/200	10.00	5.79	3.65	2.44	1.72	1.25	0.94	0.72
		Deflection limit=span/90	15.00	12.86	8.10	5.43	3.81	2.78	2.09	1.61
Internal span	Ultimate-factored load	One screw per trough	4.76	3.97	3.40	2.98	2.64	2.38	2.16	1.98
		Two screws per trough	9.53	7.94	6.81	5.76	4.56	3.69	3.05	2.56
	Serviceability-unfactored load	Deflection limit=span/200	15.00	15.00	9.66	6.47	4.55	3.31	2.49	1.92
		Deflection limit=span/90	15.00	15.00	15.00	14.38	10.10	7.36	5.53	4.26

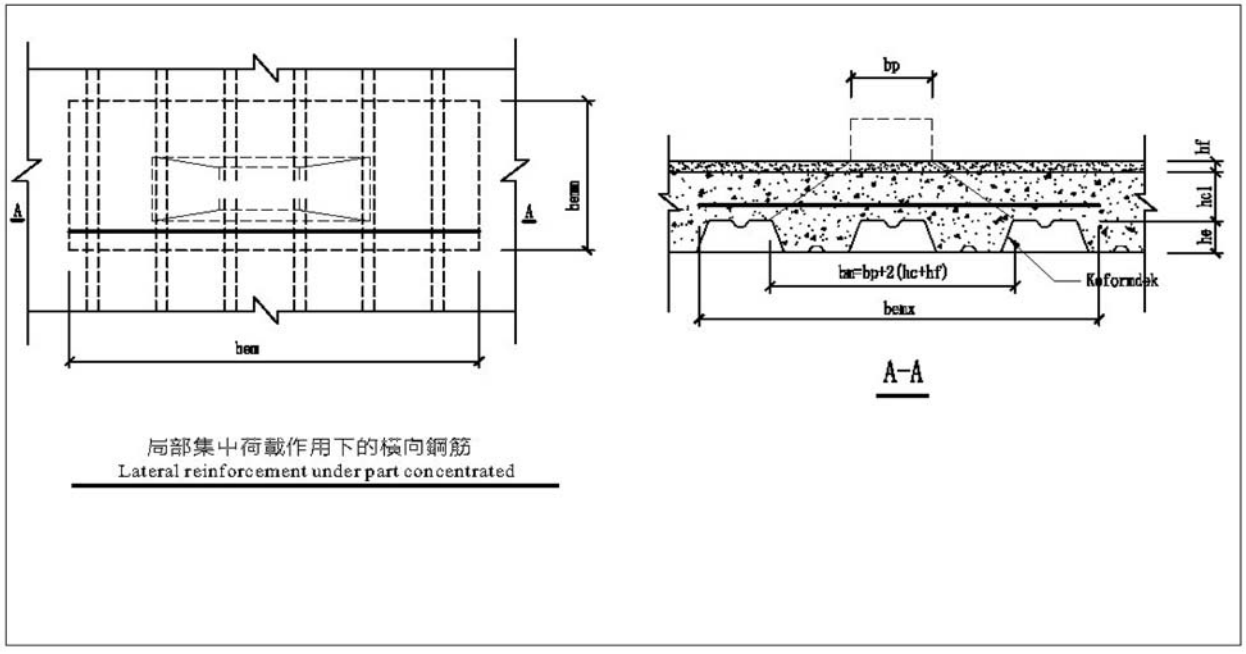
t=1.2 mm	Limit State		Span							
			2500	3000	3500	4000	4500	5000	5500	6000
Single span	Ultimate-factored load	One screw per trough	12.40	10.33	8.85	6.80	5.37	4.35	3.59	3.02
		Two screws per trough	17.42	12.09	8.88	6.80	5.37	4.35	3.59	3.02
	Serviceability-unfactored load	Deflection limit=span/200	6.69	3.87	2.44	1.63	1.15	0.84	0.63	0.48
		Deflection limit=span/90	14.86	8.60	5.42	3.63	2.55	1.86	1.40	1.08
End span	Ultimate-factored load	One screw per trough	4.96	4.13	3.54	3.10	2.75	2.48	2.25	2.06
		Two screws per trough	9.92	8.26	7.08	6.20	5.36	4.34	3.59	3.02
	Serviceability-unfactored load	Deflection limit=span/200	12.62	7.30	4.60	3.08	2.16	1.58	1.19	0.91
		Deflection limit=span/90	15.00	15.00	10.22	6.85	4.81	3.51	2.63	2.03
Internal span	Ultimate-factored load	One screw per trough	4.76	3.97	3.40	2.98	2.64	2.38	2.16	1.98
		Two screws per trough	9.53	7.94	6.18	5.96	5.29	4.76	4.23	3.56
	Serviceability-unfactored load	Deflection limit=span/200	15.00	15.00	12.19	8.17	5.73	4.18	3.14	2.42
		Deflection limit=span/90	15.00	15.00	15.00	15.00	12.74	9.29	6.98	5.38

Notes:Py=550N/mm ,Bearing length=60mm,Unit=kPa

典型節點
7． Typical Details

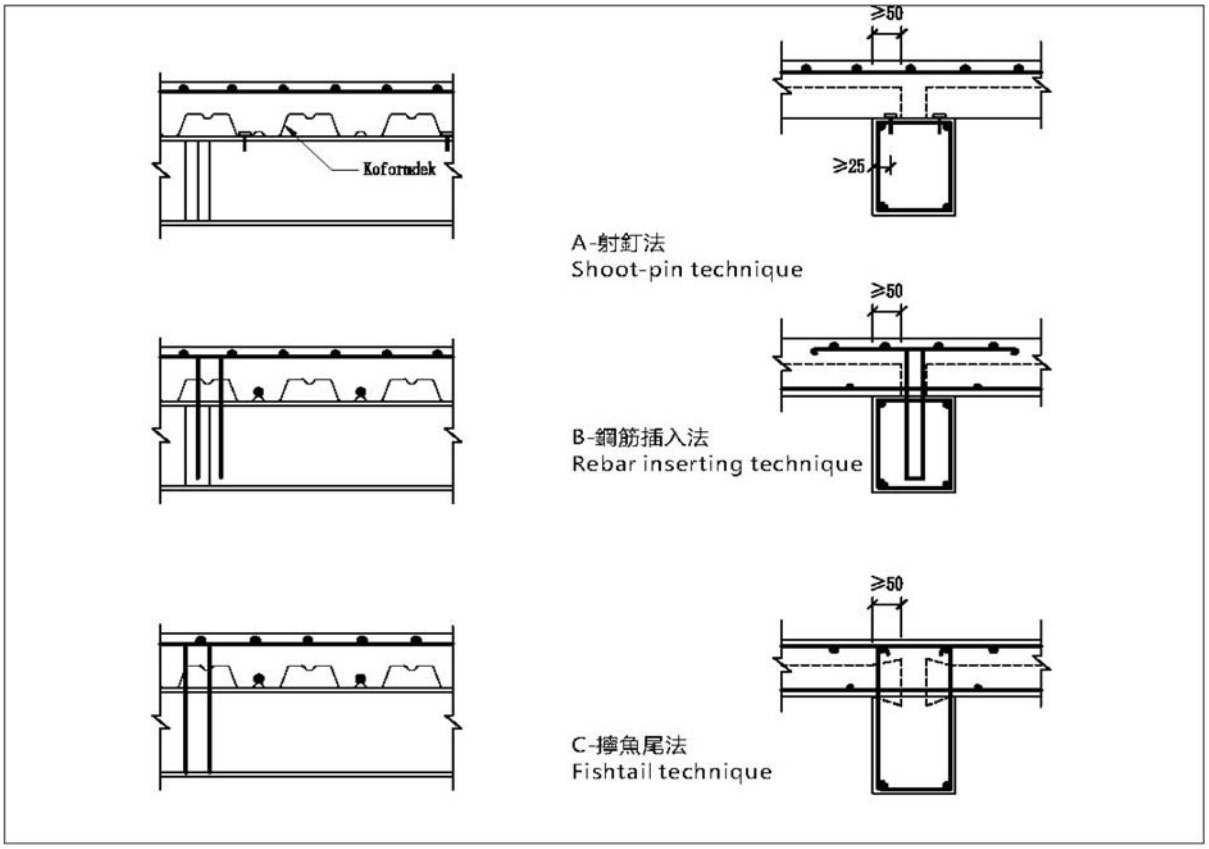


壓型鋼板鋪板平面示意圖
Profiled steel Layout

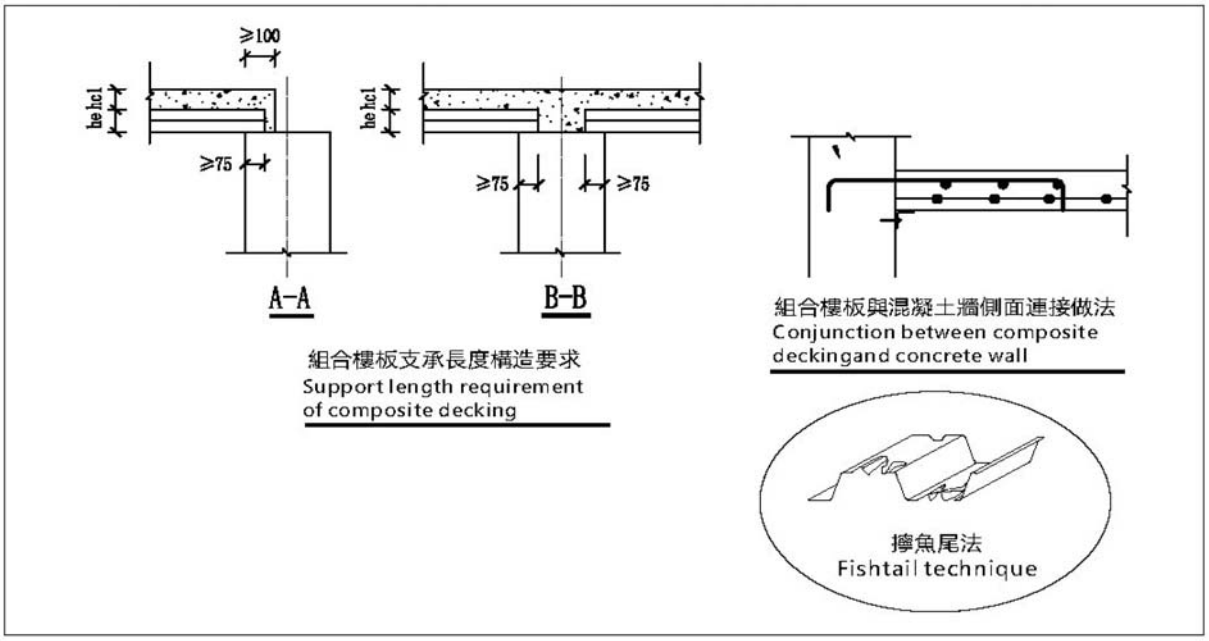


局部集中荷載作用下的橫向鋼筋
Lateral reinforcement under part concentrated

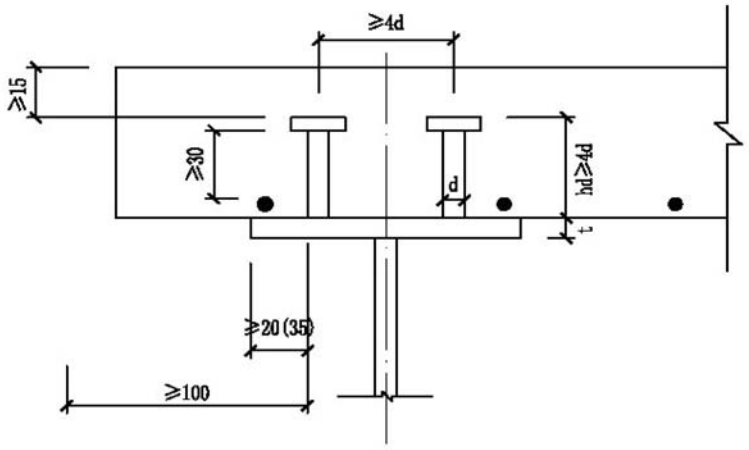
典型節點
7． Typical Details



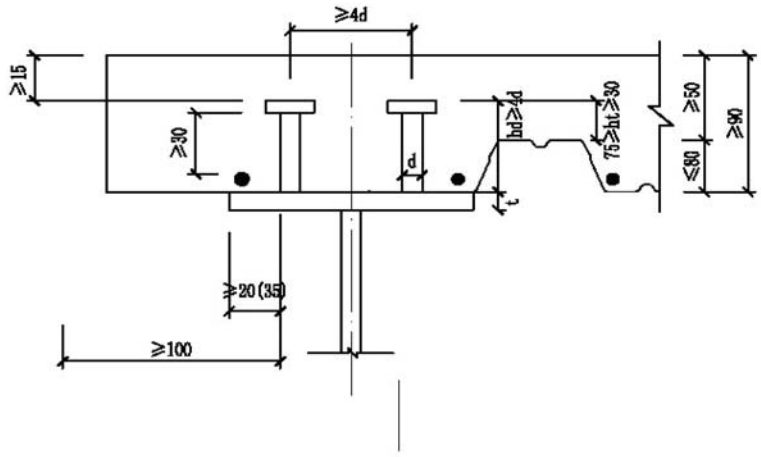
壓型鋼板錨固方法
Fishtail technique



典型節點
7． Typical Details



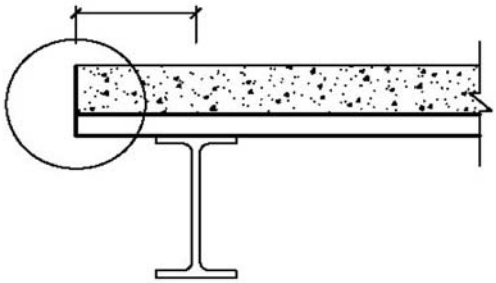
a.組合梁翼板為現澆混凝土平板
The composite beam flange is cast-in-place concrete



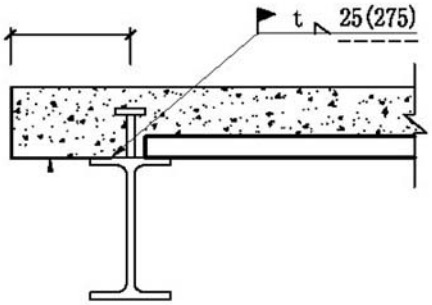
b.組合梁翼板為壓型鋼板-混凝土組合樓板
The composite beam flange is steel-concrete concrete decking

栓釘抗剪連接件構造(垂直梁長度方向)
Shear studs connection structure (vertical beam direction)

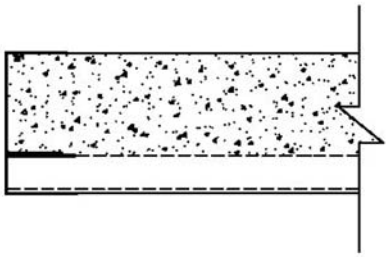
典型節點
7． Typical Details



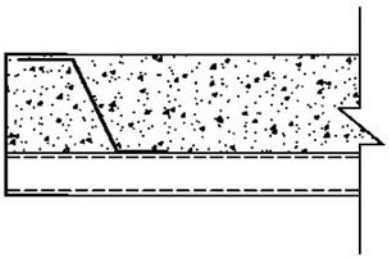
板肋與梁垂直收邊構造(1)
Plate ribs and beams perpendicular to the edge of the structure (1)



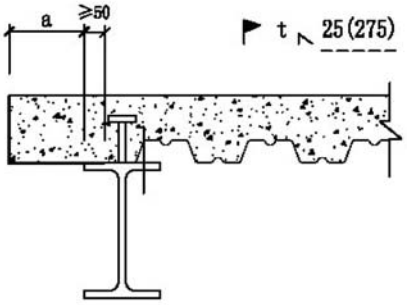
板肋與梁垂直收邊構造(2)
Plate ribs and beams perpendicular to the edge of the structure (2)



橫向收邊(1)
Horizontal Edge (1)

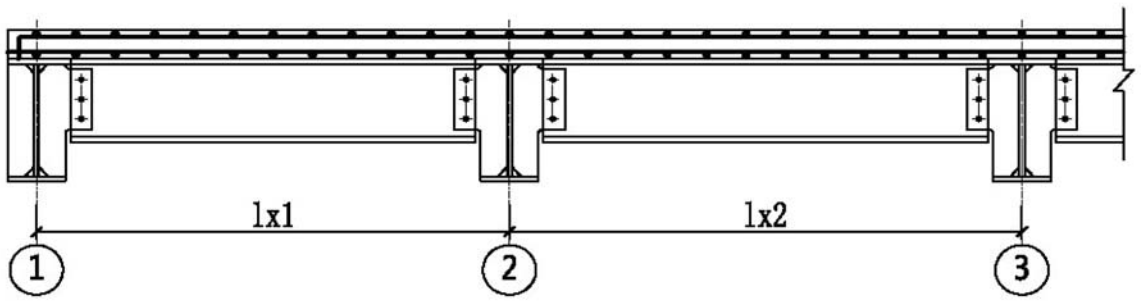


橫向收邊(2)
Horizontal Edge (2)

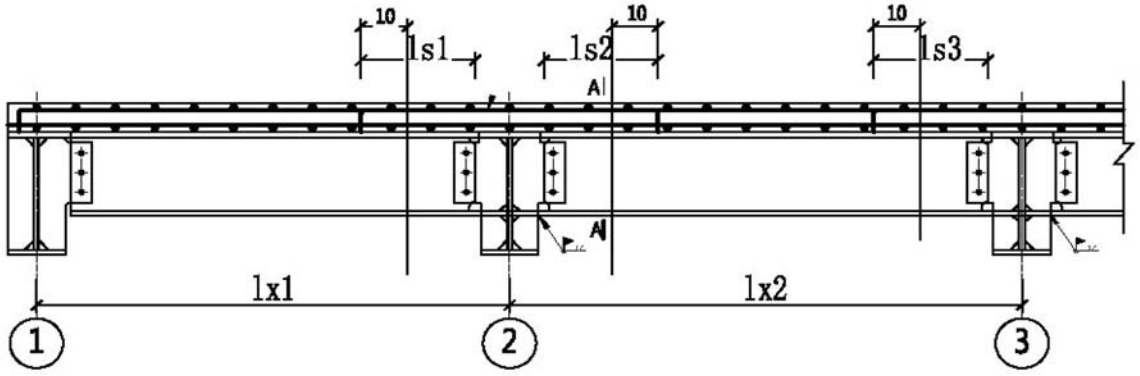


板肋與梁平行收邊構造
Parallel Structure of Plate Rib and Beam
(a≤250)

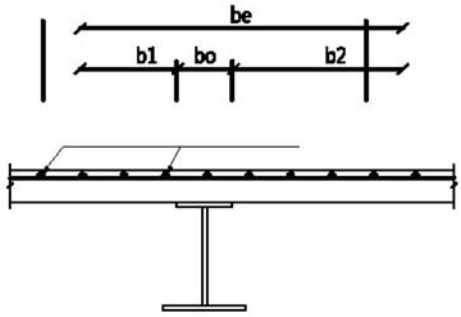
典型節點
7 . Typical Details



1-1簡支組合梁節點連接及配筋構造
Joint connection of simply supported composite beam and reinforcement structure

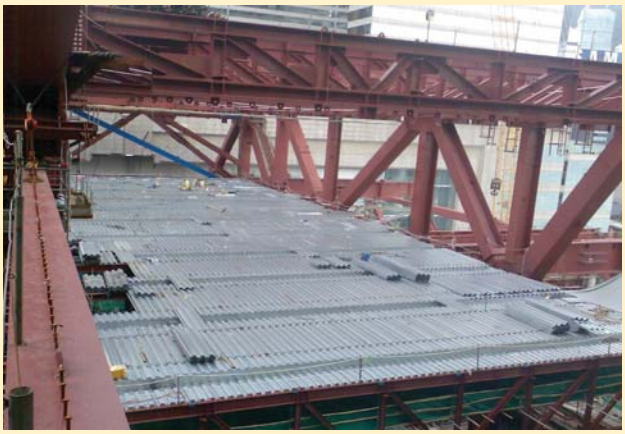


2-2連續組合梁節點連接及配筋構造
Connection of connecting composite beams and reinforcement structure



A-A

工程案例
8． Project Reference



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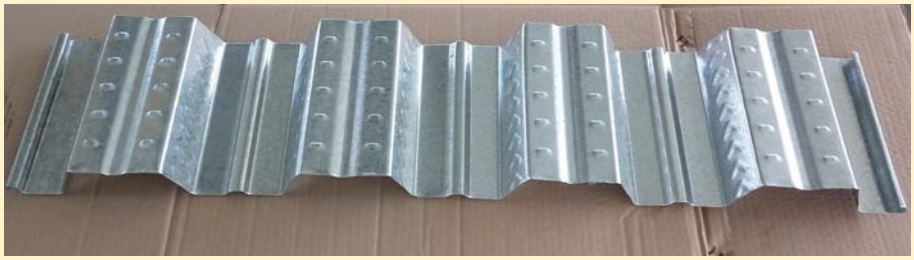
KOFORMDEK
高鋼迪

Design To BS 5950-4/6

金屬模板 屋面鋼承板

Metal Decking & Roof Decking



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