

CONSTRUCTION SYSTEMS COMPARISON - COST ANALYSIS

Precast PAD Foundation VS Traditional cast-in-place footing and pocket



PRECAST PAD FOUNDATION (FOOTING) - MONACHINO 8.2 x 8.2 x 1.7 ft

ITEM	U. M.	QUANTITY	US\$ / U. M.	COST	NOTE
Steel - Reinforcing bars (only bent - our production process does not need rebars binding)	lb	485	US\$ 0,35	US\$ 169,75	Fe B 44k 4,25 lb/ft³ (The cost does not include overhead costs and business profits)
Factory produced concrete	ft³	28,60	US\$ 1,80	US\$ 51,48	Rck 30 N/mm² S4 (The cost does not include overhead costs and business profits)
Labor	Hours	3	US\$ 30,55	US\$ 91,65	
Total				US\$ 312,88	

Overhead costs				US\$ 93,86	30%
Total costs				US\$ 406,74	
Minimum ex-works sales price				US\$ 508,43	Coefficient 1,25 (The cost includes business profits)
Amortization of the formworks				US\$ 14,30	
Royalty				US\$ 52,27	10%
Transport			US\$610,00	US\$ 43,57	ml 125 / 14 precast elements
Assembly				US\$ 43,00	4 precast foundations x 1 hour (2 unskilled workers + 1 crane)
Minimum sales price with transport and assembly				US\$ 661,57	
Assembly system (Column-Foundation)	nr	4	US\$ 12,50	US\$ 50,00	4 Anchor Bolts and 8 Threaded Coupler

Excavation	ft³	158,42	US\$ 0,19	US\$ 30,10	8,9x8,9x2 ft (with overhead costs and business profits)
Concrete in situ	ft³	85,71	US\$ 2,63	US\$ 225,41	Rck 30 N/mm² S4 (with overhead costs and business profits)
Backfilling	ft³	23,94	US\$ 0,13	US\$ 2,99	Excavation - Foundation (with overhead costs and business profits)

TOTAL PRICE				US\$ 970,08	
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TRADITIONAL CAST-IN-PLACE FOOTING WITH POCKET (SOCKET) 8.2 x 8.2 x 1.7 ft

ITEM	U. M.	QUANTITY	US\$ / U. M.	COST	NOTE
Steel - Reinforcing bars (footing base)	lb	485	US\$ 0,61	US\$ 295,85	Fe B 44k 4,25 lb/ft³ (with overhead costs and business profits)
Steel - Reinforcing bars (Pocket)	lb	382	US\$ 0,61	US\$ 233,02	Fe B 44 k (with overhead costs and business profits)

Formwork (footing base)	ft²	55,76	US\$ 3,05	US\$ 170,07	8,2x1,7x4 (with overhead costs and business profits)
Formwork (Pocket)	ft²	99,36	US\$ 3,05	US\$ 303,05	(4,3x3,6x4) + (2,6x3,6x4) - (with overhead costs and business profits)

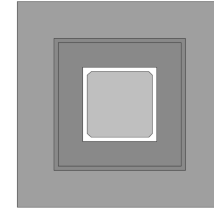
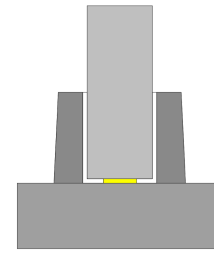
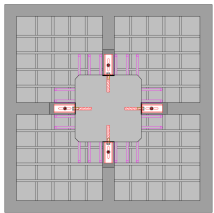
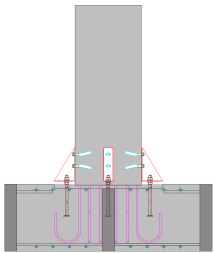
ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE

Excavation (Pocket)	ft³	345,74	US\$ 0,19	US\$ 65,69	9,8x9,8x3,6 ft (with overhead costs and business profits)
Concrete in situ (Pocket)	ft³	42,23	US\$ 2,63	US\$ 111,06	Pocket (4,3x4,3x3,6) - (2,6x2,6x3,6) ft - Rck 30 N/mm² S4 (with overhead costs and business profits)
Backfilling (Pocket)	ft³	279,18	US\$ 0,13	US\$ 34,90	Excavation - Pocket (with overhead costs and business profits)
Excavation (footing base)	ft³	192,08	US\$ 0,19	US\$ 36,50	9,8x9,8x2 ft (with overhead costs and business profits)
Concrete in situ (footing base)	ft³	114,31	US\$ 2,63	US\$ 300,63	Footing base 8,2x8,2x1,7 ft (with overhead costs and business profits)
Backfilling (footing base)	ft³	57,60	US\$ 0,13	US\$ 7,20	Excavation - Footing base (with overhead costs and business profits)
Mortar for filling between column and pocket	ft³	9,94	US\$ 2,63	US\$ 26,13	

TOTAL PRICE				US\$1.584,09	
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PERCENTAGE SAVINGS				39%	
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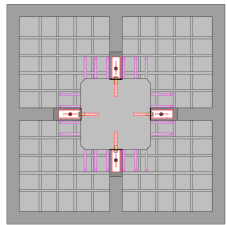
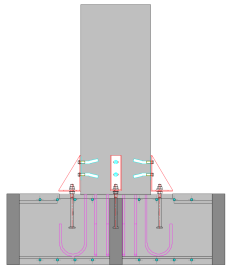
SAVING MADE BY USING OUR CONSTRUCTION SYSTEM				US\$ 614,01	
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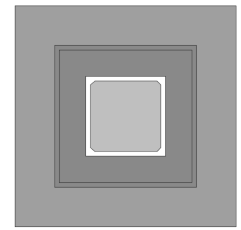
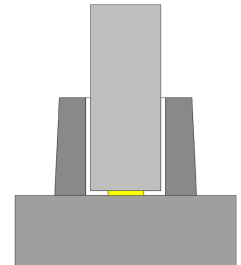
CONSTRUCTION SYSTEMS COMPARISON - COST ANALYSIS
Precast PAD Foundation VS Traditional cast-in-place footing and precast pocket



PRECAST PAD FOUNDATION (FOOTING) - MONACHINO 8.2 x 8.2 x 1.7 ft						
ITEM	U. M.	QUANTITY	US\$ / U. M.	COST	NOTE	
PRECAST PAD FOUNDATION (FOOTING)	Steel - Reinforcing bars (only bent - our production process does not need rebars binding)	lb	485	US\$ 0,35	US\$169,75	Fe B 44k 4,25 lb/ft³ (The cost does not include overhead costs and business profits)
	Factory produced concrete	ft³	28,60	US\$ 1,80	US\$ 51,48	Rck 30 N/mm² S4 (The cost does not include overhead costs and business profits)
	Labor	Hours	3	US\$ 30,55	US\$ 91,65	
	Total				US\$312,88	
	Overhead costs				US\$ 93,86	30%
	Total costs				US\$406,74	
	Minimum ex-works sales price				US\$508,43	Coefficient 1,25 (The cost includes business profits)
	Amortization of the formworks				US\$ 14,30	
	Royalty				US\$ 52,27	10%
	Transport			US\$ 610,00	US\$ 43,57	ml 125 / 14 precast elements
	Assembly				US\$ 43,00	4 precast foundations x 1 hour (2 unskilled workers + 1 crane)
	Minimum sales price with transport and assembly				US\$661,57	
	Assembly system (Column-Foundation)	nr	4	US\$ 12,50	US\$ 50,00	4 Anchor Bolts and 8 Threaded Coupler
	ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE	Excavation	ft³	158,42	US\$ 0,19	US\$ 30,10
Concrete in situ		ft³	85,71	US\$ 2,63	US\$225,41	Rck 30 N/mm² S4 (with overhead costs and business profits)
Backfilling		ft³	23,94	US\$ 0,13	US\$ 2,99	Excavation - Foundation (with overhead costs and business profits)
TOTAL PRICE					US\$970,08	



TRADITIONAL CAST-IN-PLACE FOOTING WITH PRECAST POCKET (SOCKET) 8.2 x 8.2 x 1.7 ft							
ITEM	U. M.	QUANTITY	US\$ / U. M.	COST	NOTE		
PRECAST POCKET	Steel - Reinforcing bars (Precast Pocket)	lb	382	US\$ 0,44	US\$ 168,08	Fe B 44 k (The cost does not include overhead costs and business profits)	
	Factory produced concrete (Precast Pocket)	ft³	42,23	US\$ 1,80	US\$ 76,01	Pocket 4,3x4,3x3,6 ft Rck 30 N/mm² S4 (The cost does not include overhead costs and business profits)	
	Labor	Hours	4	US\$ 30,55	US\$ 122,20		
	Total				US\$ 366,29		
	Overhead costs				US\$ 109,89	30%	
	Total costs				US\$ 476,18		
	Minimum ex-works sales price				US\$ 595,22	Coefficient 1,25 (The cost includes business profits)	
	Amortization of the formworks				US\$ 14,30		
	Transport			US\$610,00	US\$ 67,78	ml 125 / 9 precast elements	
	Assembly				US\$ 43,00	4 precast pocket x 1 hour (2 unskilled workers + 1 crane)	
	Minimum sales price with transport and assembly				US\$ 720,30		
	ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE	Excavation (Precast Pocket)	ft³	345,74	US\$ 0,19	US\$ 65,69	9,8x9,8x3,6 ft (with overhead costs and business profits)
		Excavation (footing base)	ft³	192,08	US\$ 0,19	US\$ 36,50	9,8x9,8x2 ft (with overhead costs and business profits)
		Formwork (footing base)	ft²	55,76	US\$ 3,05	US\$ 170,07	8,2x1,7x4 (with overhead costs and business profits)
Steel - Reinforcing bars (footing base)		lb	485	US\$ 0,61	US\$ 295,85	Fe B 44k 4,25 lb/ft³ (with overhead costs and business profits)	
Concrete in situ (footing base)		ft³	114,31	US\$ 2,63	US\$ 300,63	Footing base 8,2x8,2x1,7 ft (with overhead costs and business profits)	
Backfilling (Precast Pocket)		ft³	279,18	US\$ 0,13	US\$ 34,90	Excavation - Pocket (with overhead costs and business profits)	
Backfilling (footing base)	ft³	57,60	US\$ 0,13	US\$ 7,20	Excavation - Footing base (with overhead costs and business profits)		
Mortar for filling between column and pocket	ft³	9,94	US\$ 2,63	US\$ 26,13			
TOTAL PRICE					US\$ 1.657,26		
PERCENTAGE SAVINGS					41%		
SAVING MADE BY USING OUR CONSTRUCTION SYSTEM					US\$ 687,18		



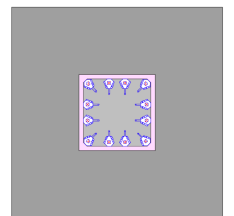
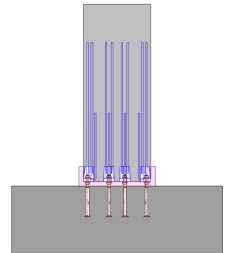
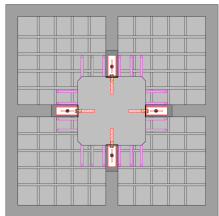
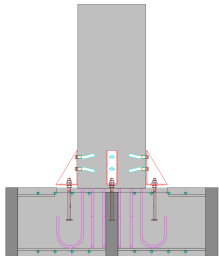
CONSTRUCTION SYSTEMS COMPARISON - COST ANALYSIS -
Precast PAD Foundation VS Traditional cast-in-place footing with connection systems such as PEIKKO or HALFEN



PRECAST PAD FOUNDATION (FOOTING) - MONACHINO 8.2 x 8.2 x 1.7 ft						
ITEM	U. M.	QUANTITY	US\$ / U. M.	COST		NOTE
Steel - Reinforcing bars (only bent - our production process does not need rebars binding)	lb	485	US\$ 0,35	US\$169,75		Fe B 44k 4,25 lb/ft³ (The cost does not include overhead costs and business profits)
Factory produced concrete	ft³	28,60	US\$ 1,80	US\$ 51,48		Rck 30 N/mm² S4 (The cost does not include overhead costs and business profits)
Labor	Hours	3	US\$ 30,55	US\$ 91,65		
Total				US\$312,88		
Overhead costs				US\$ 93,86	30%	
Total costs				US\$406,74		
Minimum ex-works sales price				US\$508,43		Coefficient 1,25 (The cost includes business profits)
Amortization of the formworks				US\$ 14,30		
Royalty				US\$ 52,27	10%	
Transport			US\$ 610,00	US\$ 43,57		ml 125 / 14 precast elements
Assembly				US\$ 43,00		4 precast foundations x 1 hour (2 unskilled workers + 1 crane)
Minimum sales price with transport and assembly				US\$661,57		
Assembly system (Column-Foundation)	nr	4	US\$ 12,50	US\$ 50,00		4 Anchor Bolts and 8 Threaded Coupler
Excavation	ft³	158,42	US\$ 0,19	US\$ 30,10		8,9x8,9x2 ft (with overhead costs and business profits)
Concrete in situ	ft³	85,71	US\$ 2,63	US\$225,41		Rck 30 N/mm² S4 (with overhead costs and business profits)
Backfilling	ft³	23,94	US\$ 0,13	US\$ 2,99		Excavation - Foundation (with overhead costs and business profits)
TOTAL PRICE				US\$970,08		

TRADITIONAL CAST-IN-PLACE FOOTING WITH BOLTED CONNECTION SUCH AS PEIKKO / HALFEN - 8.2 x 8.2 x 1.7 ft						
ITEM	U. M.	QUANTITY	US\$ / U. M.	COST		NOTE
Steel - Reinforcing bars (footing base)	lb	485	US\$ 0,61	US\$ 295,85		Fe B 44k 4,25 lb/ft³ (with overhead costs and business profits)
Formwork (footing base)	ft²	55,76	US\$ 3,05	US\$ 170,07		8,2x1,7x4 (with overhead costs and business profits)
Jig				US\$ 60,00		
Transport and assembly of the jig				US\$ 60,00		
Expansive mortar				US\$ 98,00		The cost includes preparation and pouring
Additional reinforcing bars to join the Jig to the footing reinforcing cage	lb	44	US\$ 0,61	US\$ 26,84		Fe B 44 k (with overhead costs and business profits)
Connection systems (Column-Foundation)	nr	6	US\$ 72,00	US\$ 432,00		Anchor Bolts and Column Shoes
Excavation (footing base)	ft³	192,08	US\$ 0,19	US\$ 36,50		9,8x9,8x2 ft (with overhead costs and business profits)
Concrete in situ (footing base)	ft³	114,31	US\$ 2,63	US\$ 300,63		Footing base 8,2x8,2x1,7 ft (with overhead costs and business profits)
Backfilling (footing base)	ft³	57,60	US\$ 0,13	US\$ 7,20		Excavation - Footing base (with overhead costs and business profits)
TOTAL PRICE				US\$ 1.487,08		
PERCENTAGE SAVINGS				35%		
SAVING MADE BY USING OUR CONSTRUCTION SYSTEM				US\$ 517,00		

This solution is not recommended for Seismic Zones



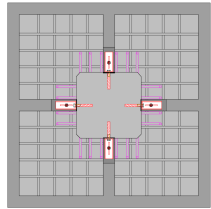
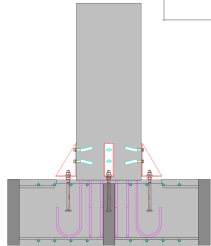
ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE

ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE

CONSTRUCTION SYSTEMS COMPARISON - COST ANALYSIS -
Precast PAD Foundation VS Traditional cast-in-place footing with steel corrugated tubes



PRECAST PAD FOUNDATION (FOOTING) - MONACHINO 8.2 x 8.2 x 1.7 ft						
ITEM	U. M.	QUANTITY	US\$ / U. M.	COST	NOTE	
PRECAST PAD FOUNDATION (FOOTING)	Steel - Reinforcing bars (only bent - our production process does not need rebars binding)	lb	485	US\$ 0,35	US\$169,75	Fe B 44k (The cost does not include overhead costs and business profits)
	Factory produced concrete	ft³	28,60	US\$ 1,80	US\$ 51,48	Rck 30 N/mm² S4 (The cost does not include overhead costs and business profits)
	Labor	Hours	3	US\$ 30,55	US\$ 91,65	
	Total				US\$312,88	
	Overhead costs				US\$ 93,86	30%
	Total costs				US\$406,74	
	Minimum ex-works sales price				US\$508,43	Coefficient 1,25 (The cost includes business profits)
	Amortization of the formworks				US\$ 14,30	
	Royalty				US\$ 52,27	10%
	Transport			US\$ 610,00	US\$ 43,57	ml 125 / 14 precast elements
ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE	Assembly			US\$ 43,00	4 precast foundations x 1 hour (2 unskilled workers + 1 crane)	
	Minimum sales price with transport and assembly				US\$661,57	
	Assembly system (Column-Foundation)	nr	4	US\$ 12,50	US\$ 50,00	4 Anchor Bolts and 8 Threaded Coupler
	Excavation	ft³	158,42	US\$ 0,19	US\$ 30,10	8,9x8,9x2 ft (with overhead costs and business profits)
	Concrete in situ	ft³	85,71	US\$ 2,63	US\$225,41	Rck 30 N/mm² S4 (with overhead costs and business profits)
Backfilling	ft³	23,94	US\$ 0,13	US\$ 2,99	Excavation - Foundation (with overhead costs and business profits)	
TOTAL PRICE				US\$970,08		



TRADITIONAL CAST-IN-PLACE FOOTING WITH STEEL CORRUGATED TUBES - 8.2 x 8.2 x 2.6 ft						
ITEM	U. M.	QUANTITY	US\$ / U. M.	COST	NOTE	
ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE	Steel - Reinforcing bars (footing base)	lb	485	US\$ 0,61	US\$ 295,85	Fe B 44k 4,25 lb/ft³ (with overhead costs and business profits)
	Formwork (footing base)	ft²	85,28	US\$ 3,05	US\$ 260,10	8,2x2,6x4 (with overhead costs and business profits)
	Jig for 16 corrupted tubes				US\$ 245,00	
	Transport and assembly of the jig				US\$ 123,00	
	Expansive mortar				US\$ 281,00	The cost includes preparation and pouring
	Connection systems (Column-Foundation)	nr	4	US\$ 49,00	US\$ 196,00	Anchor Bolts and Column Shoes
	Excavation (footing base)	ft³	288,12	US\$ 0,19	US\$ 54,74	9,8x9,8x3 ft (with overhead costs and business profits)
	Concrete in situ (footing base)	ft³	181,55	US\$ 2,63	US\$ 477,47	Footing base 8,2x8,2x2,7 ft (with overhead costs and business profits)
	Backfilling (footing base)	ft³	86,40	US\$ 0,13	US\$ 10,80	Excavation - Footing base (with overhead costs and business profits)
	TOTAL PRICE				US\$ 1.943,97	
PERCENTAGE SAVINGS				50%		
SAVING MADE BY USING OUR CONSTRUCTION SYSTEM				US\$ 973,89		

