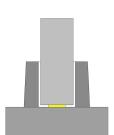
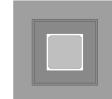
## CONSTRUCTION SYSTEMS COMPARISON - COST ANALYSIS Precast PAD Foundation VS Traditional cast-in-place footing and pocket

		PREC	CAST P/		ATION (FOO x 11.50 x 2	TING) - MON ,3 ft	ACHINO
1		ITEM	U. M.	QUANTITY	US\$ / U. M.	COST	NOTE
		Steel - Reinforcing bars (only bent - our production process does not need rebars binding)	lb	1653	US\$ 0,35	US\$ 578,55	Fe B 44k 6,7 lb/ft <sup>3</sup> (The cost does not include overhead costs and business profits)
FOU	RECAST PAD INDATION DOTING)	Factory produced concrete	ft <sup>3</sup>	57,50	US\$ 1,80	US\$ 103,50	Rck 30 N/mm <sup>2</sup> S4 (The cost does not include overhead costs and business profits)
		Labor	Hours	3	US\$ 30,55	US\$ 91,65	
		Total				US\$ 773,70	
		Overhead costs				US\$ 232,11	30%
		Total costs				US\$1.005,81	
		Minimum ex- works sales price				US\$1.257,26	Coefficient 1,25 (The cost includes business profits)
	-	Amortization of the formworks				US\$ 18,00	
	•	Royalty				US\$ 127,53	10%
		Transport			US\$610,00	US\$ 101,67	ml 125 / 6 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\$1.547,46	
		Assembly system (Column- Foundation)	nr	4	US\$ 12,50	US\$ 50,00	4 Anchor Bolts and 8 Threaded Coupler
		Excavation	ft³	386,98	US\$ 0,19	US\$ 73,53	12,2×12,2×2,6 ft (with overhead costs and business profits)
TH C/ OU	TIVITIES IAT ARE ARRIED T IN THE DRKSITE	Concrete in situ	ft³	246,68	US\$ 2,63	US\$ 648,76	Rck 30 N/mm <sup>2</sup> S4 (with overhead costs and business profits)
		Backfilling	ft³	43,13	US\$ 0,13	US\$ 5,39	Excavation - Foundation (with overhead costs and business profits)
-			TOTAL	PRICE		US\$2.325,13	

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	TRADITIO	ONAL			FOOT 11.50			CKET (SOCKET)
	ITEM	U. M.	QUANTITY	US\$	/U. М.	c	OST	NOTE
	Steel - Reinforcing bars (footing base)	lb	1653	US\$	0,61	US\$	1.008,33	Fe B 44k 6,7 lb/ft³ (with overhead costs and business profits)
	Steel - Reinforcing bars (Pocket)	lb	610	US\$	0,61	US\$	372,10	Fe B 44 k (with overhead costs and business profits)
	Formwork (footing base)	ft²	105,80	US\$	3,05	US\$	322,69	11,5x2,3x4 (with overhead costs and business profits)
	Formwork (Pocket)	ft²	132,48	US\$	3,05	US\$	404,06	(5,6×3,6×4) + (3,6×3,6×4) - (with overhead costs and business profits)
ACTIVITIES THAT ARE CARRIED								
OUT IN THE WORKSITE	Excavation (Pocket)	ft <sup>3</sup>	617,80	US\$	0,19	US\$	117,38	13,1x13,1x3,6 ft (with overhead costs and business profits)
	Concrete in situ (Pocket)	ft³	66,24	US\$	2,63	US\$	174,21	Pocket (5,6×5,6×3,6) ft - Rck 30 N/mm <sup>2</sup> S4 (with overhead costs and business profits)
	Backfilling (Pocket)	ft³	504,90	US\$	0,13	US\$	63,11	Excavation - Pocket (with overhead costs and business profits)
	Excavation (footing base)	ft³	446,19	US\$	0,19	US\$	84,78	13,1×13,1×2,6 ft (with overhead costs and business profits)
	Concrete in situ (footing base)	ft³	304,18	US\$	2,63	US\$	799,98	Footing base 11,5×11,5×2,3 ft (with overhead costs and business profits)
	Backfilling (footing base)	ft <sup>3</sup>	102,34	US\$	0,13	US\$	12,79	Excavation - Footing base (with overhead costs and business profits)
	Mortar for filling between column and pocket	ft³	14,26	US\$	2,63	US\$	37,49	
		ΤΟΤΑΙ	PRICE			US\$	3.396,93	
	PER	CENTA	GE SAVINGS	3			32%	
			BY USING (			US\$	1.071,80	

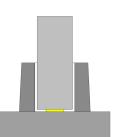




## CONSTRUCTION SYSTEMS COMPARISON - COST ANALYSIS Precast PAD Foundation VS Traditional cast-in-place footing and precast pocket

PRECAT PAD FOUNDATION (FOOTING)     bars (only bent- orychaed costs and business profits)     cost does not business profits)     cost does not business profits)       Image: Concrete Pad POUNDATION (FOOTING)     Fd*     57,50     USS     1,80     USS     103,50     Rck 30 N/mm* 54 (The cost does not include overhead costs and business profits)       Image: Concrete Concrete     ft*     57,50     USS     1,80     USS     103,50     Rck 30 N/mm* 54 (The cost does not include overhead costs and business profits)       Image: Concrete Concrete     Image: Concrete     USS     232,11     30%       Image: Concrete Concrete     USS     105,81     USS     105,81       Image: Concrete Concrete     Image: Concrete     USS     127,53     10%       Image: Concrete     Image: Concrete     USS     10,60     105,81     10,60       Image: Concrete     Image: Concrete     USS     10,60     10,55     10,60       Image: Concrete     Image: Concrete     Image: Concrete     USS     10,60     10,55     10,60       Image: Concrete     Royalty     Image: Concrete     USS     10,55     10,56     10	11.50 x 11.50 x 2.3 ft       TEM     U.M.     COST     NOTE       TEM INTER     U.M.     COST     NOTE       TEM INTER     U.M.     COST     NOTE       TEM INTER     NOTE       PRECAST POUNDATION     Feltor produced concrete     ft <sup>3</sup> STATE       FECAST POUNDATION     Feltor produced concrete     ft <sup>3</sup> STATE       Labor     Hours 3     USS 30.55     USS 91,65       Overhead costs     USS 773,70       Overhead costs     USS 18,00       Minimum ex- works sales price     USS 18,00     Coefficient 1,25 (The cost include business profits)       Amortization of the formworks     USS 610,00     USS 18,00       Amortization of the formworks     USS 610,00     USS 160,60       Amortization of the formworks     USS 610,00     USS 16									
PRECAT PROMINTER     Steel - Reinforcing bars (only bert, production process does not binding)     ib     1653     USS     0,35     USS     578,55     Fe B 44k 6,7 lb/th <sup>2</sup> (The (The cost does not include our mode does not binding)       FOUNDATION (POOTING)     Fectory produced concrete     ft <sup>3</sup> 57,50     USS     1,80     USS     103,50     Rck 30 N/mm <sup>2</sup> 54 (The cost does not include our entre does not business profits)       Labor     Hours     3     USS     30,55     USS     91,65       Correte     Total     USS     30,55     USS     91,65       Total     Overhead costs     USS     103,00     Coefficient 1.25 (The cost includes business profits)       Amortization of the formworks     USS     10,00     USS     10,77     ml 125 / 6 precast elements       Anortization of the formworks     USS     10,00     USS     10,77     ml 125 / 6 precast elements       Assembly     USS     10,00     USS     10,47     ml 125 / 6 precast elements       Assembly     USS     10,00     USS     10,47     ml 25 / 6 precast elements       Activities for ewith coandationy <t< th=""><th>PRECAT POUNDATION (FOOTING)     Steel - Reinforcing bars (only berti- aur production process does not binding)     1b     1553     USS     0,35     USS     578,55     Fe B 44k 6,7 lb/H* (The cost does not business profils)       POUNDATION (FOOTING)     Factory produced concrete     ft*     57,50     USS     1,80     USS     103,60     Rck 30 N/mm* 54 (The cost does not include cost does not usiness profils)       Amortization of the formworks     Image: Ima</th><th>Ŷ</th><th>PRE</th><th>CAST</th><th></th><th></th><th></th><th></th><th>i) - MOI</th><th>IACHINO</th></t<>	PRECAT POUNDATION (FOOTING)     Steel - Reinforcing bars (only berti- aur production process does not binding)     1b     1553     USS     0,35     USS     578,55     Fe B 44k 6,7 lb/H* (The cost does not business profils)       POUNDATION (FOOTING)     Factory produced concrete     ft*     57,50     USS     1,80     USS     103,60     Rck 30 N/mm* 54 (The cost does not include cost does not usiness profils)       Amortization of the formworks     Image: Ima	Ŷ	PRE	CAST					i) - MOI	IACHINO
PRECAT PAD FOUNDATION (FOOTING)     bars (only bent - production process does not binding)     diam (initial mathematical concrete     diam (initial mathematical mathematical concrete     concrete (initial mathematic	PRECAST POUNDATION (COUTING)     Data (only best - production process does not binding)     Main (Minimum size production binding)     Main (Minimum size profile)     Main	<i>y</i> , y	ITEM	U. M.	QUANTITY	US\$ /	′ U. M.	С	OST	NOTE
POUNDATION (FOOTING)     Factory produced concrete     ft*     57,50     USS     1,80     USS     103,50     Rek 30 N/mm <sup>3</sup> S4 (the cost does not include overhead costs and business profits)       Labor     Hours     3     USS     30,55     USS     91,65       Total     USS     73,70     USS     232,11     30%       Total costs     USS     1.05,81     USS     0.05,81       Minimum ex- works sales price     USS     18,00     Coefficient 1,25 (The cost includes business profits)       Amortization of the formworks     USS     10,00     USS     10,07       Transport     USS     610,00     USS     10,67     ml 125 / 6 precast elements       Transport     USS     610,00     USS     10,67     ml 125 / 6 precast elements       Minimum sales price with transport and assembly     Image: sprice with transport and assembly     USS     12,50     USS     50,00     4 Anchor Bolts and 8 Threaded Couple'       Assembly system (Column- Foundation)     nr     4     USS     12,250     USS     50,00     4 Anchor Bolts and 9 Threaded Couple'	FOUNDATION (FOOTING)     Factory produced concrete     ft <sup>8</sup> 57,50     USS     1,80     USS     103,60     Reck 30 Wrim*94 (the cost does not include overhead costs and business profits)       Labor     Hours     3     USS     30,55     USS     91,65       Overhead costs     USS     232,11     30%     30%     30%       Minimum ex- works sales price     USS     1,80     USS     1,80     Coefficient 1,25 (The cost includes business profits)       Amortization of the formworks     Minimum ex- works sales price     USS     610,00     USS     18,00       Transport     USS     610,00     USS     101,67     ml 125 / 6 precast elements       Assembly     Image: same same same same same same same same		bars (only bent - our production process does not need rebars	lb	1653	US\$	0,35	US\$	578,55	cost does not include overhead costs and
Initial     Initial <t< td=""><td>India     Correction     USS     773,70       Overhead costs     USS     232,11     30%       Total costs     USS     232,11     30%       Minimum ex- works sales price     USS     1257,26     Coefficient 1.25 (The cost includes business profits)       Amortization of the formworks     USS     180,00     USS     10%       Royalty     USS     10,00     USS     101,67     ml 125 / 6 precast elements       Assembly     USS     610,00     USS     10,67     ml 125 / 6 precast elements       Minimum sales price with transport and assembly     USS     610,00     USS     10,67     ml 125 / 6 precast elements       Minimum sales price with transport and assembly     USS     12,57,36     4 precast foundations x 1 hour (2 unskilled workers + 1 crane)       Minimum sales price with transport and assembly     Interference     Interference     1.57,46       Minimum sales price with transport and assembly     Interference     Interference     1.57,46       Activities that are Out and the assembly system (Column- Foundation)     nr     4     USS     12,50     4 Anchor Bolts and 8 Threaded Coupler &lt;</td><td>FOUNDATION</td><td></td><td>ft<sup>3</sup></td><td>57,50</td><td>US\$</td><td>1,80</td><td>US\$</td><td>103,50</td><td>cost does not include overhead costs and</td></t<>	India     Correction     USS     773,70       Overhead costs     USS     232,11     30%       Total costs     USS     232,11     30%       Minimum ex- works sales price     USS     1257,26     Coefficient 1.25 (The cost includes business profits)       Amortization of the formworks     USS     180,00     USS     10%       Royalty     USS     10,00     USS     101,67     ml 125 / 6 precast elements       Assembly     USS     610,00     USS     10,67     ml 125 / 6 precast elements       Minimum sales price with transport and assembly     USS     610,00     USS     10,67     ml 125 / 6 precast elements       Minimum sales price with transport and assembly     USS     12,57,36     4 precast foundations x 1 hour (2 unskilled workers + 1 crane)       Minimum sales price with transport and assembly     Interference     Interference     1.57,46       Minimum sales price with transport and assembly     Interference     Interference     1.57,46       Activities that are Out and the assembly system (Column- Foundation)     nr     4     USS     12,50     4 Anchor Bolts and 8 Threaded Coupler <	FOUNDATION		ft <sup>3</sup>	57,50	US\$	1,80	US\$	103,50	cost does not include overhead costs and
Overhead costs     US\$ 232,11     30%       Total costs     US\$ 1.257,26     Coefficient 1,25 (The cost includes business profits)       Amortization of the formworks     US\$ 127,53     10%       Amortization of the formworks     US\$ 127,53     10%       Transport     US\$ 610,00     US\$ 101,67     ml 125 / 6 precast elements       Assembly     US\$ 610,00     US\$ 43,00     4 precast foundations x 1 hour (2 unskilled workers + 1 crane)       Minimum sales price with transport and assembly     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler Foundation)       Assembly system (Column-Foundation)     nr     4     US\$ 12,60     US\$ 73,53     12,2×12,2×2,6 ft (with overhead costs and 8 Threaded Coupler Foundation)       Activities     Excavation     ft*     246,68     US\$ 2,63     US\$ 648,76     Rck 30 Nmm* 54 (with overhead costs and business profits)       OUT IN THE WORKSITE     Backfilling     ft*     43,13     US\$ 0,13     US\$ 5,39     Excavation (with overhead costs and business profits)	Overhead costs     US\$ 232,11     30%       Total costs     US\$1.257,26     Coefficient 1,25 (The cost includes business profits)       Amorization of the formworks     US\$ 127,53     10%       Royalty     US\$ 610,00     US\$ 127,53     10%       Transport     US\$ 610,00     US\$ 127,53     10%       Transport     US\$ 610,00     US\$ 43,00     4 precast foundations x 1 hour (2 unskilled workers + 1 crane)       Minimum sales price with transport and assembly     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler workers + 1 crane)       Minimum sales price with transport and assembly     Image: state of the transport and assembly <td< td=""><td></td><td>Labor</td><td>Hours</td><td>3</td><td>US\$</td><td>30,55</td><td>US\$</td><td>91,65</td><td></td></td<>		Labor	Hours	3	US\$	30,55	US\$	91,65	
Total costs     US\$1.05,81       Minimum ex- works sales price     US\$1.257,28     Coefficient 1,25 (The cost includes business profits)       Amortization of the formworks     US\$ 127,53     10%       Royalty     US\$ 610,00     US\$ 127,53     10%       Transport     US\$ 610,00     US\$ 101,67     ml 125 / 6 precast elements       Assembly     US\$ 610,00     US\$ 43,00     4 precast foundations x 1 hour (2 unskilled workers + 1 crane)       Minimum sales price with transport and assembly     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler       Assembly system (Column- Foundation)     nr     4     US\$ 12,50     US\$ 73,53     122×12,2×2,6 ft (with overhead costs and business profits)       Activities THAT ARF WORKSITE     Excavation     ft³     386,98     US\$ 2,63     US\$ 648,76     RcK 30 NVmr 24 (with overhead costs and business profits)	Total costs     US\$1.05,81       Minimum exworks sales price     US\$1.257,26     Coefficient 1,25 (The cost includes business profits)       Amortization of the formworks     US\$ 127,53     10%       Royalty     US\$ 127,53     10%       Transport     US\$ 610,00     US\$ 101,67     ml 125 / 6 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\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler Foundations (Column-Foundations)       Assembly system That ARE Counce in situ     nr     4     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler Foundations)       Assembly system That ARE Concrete in situ     ft*     386,98     US\$ 2,63     US\$ 648,76     Fck 430 Nrmm* 54 (with overhead costs and business profits)       More the instruction of t*     Backfilling     ft*     43,13     US\$ 0,13     US\$ 5,39     Excavation - Foundation		Total					US\$	773,70	
Total costs     USS1.005.81       Minimum ex- works sales price     USS1.257.26     Coefficient 1.25 (The cost includes business profits)       Amortization of the formworks     USS 18,00     USS 127,53     10%       Royalty     USS 610,00     USS 101,67     ml 125 / 6 precast elements       Assembly     USS 610,00     USS 101,67     ml 125 / 6 precast elements       Minimum sales price with transport and assembly     USS 143,00     4 precast foundations x 1 hour (2 unskilled workers + 1 crane)       Minimum sales price with transport and assembly     USS 12,547,46     USS 1.547,46       Minimum sales price with transport and assembly     USS 12,50     USS 50,00     4 Anchor Bolts and 8 Threaded Coupler       Assembly system (Column- Foundation)     nr     4     USS 12,50     USS 50,00     4 Anchor Bolts and 8 Threaded Coupler       Activities THAT ARF WORKSITE     Excavation     ft <sup>3</sup> 386,98     USS 0,19     USS 73,53     12,2×12,2×2,6 ft (with overhead costs and business profits)       Concrete in situ     ft <sup>3</sup> 246,68     USS 0,13     USS 6,48,76     Rck 30 Nrme* 24 (with overhead costs and business profits)	Total costs     US\$1.005,81       Minimum exworks sales price     US\$1.257,26     Coefficient 1,25 (The cost includes business profits)       Amortization of the formworks     US\$ 127,53     10%       Royalty     US\$ 610,00     US\$ 127,65     for elements       Transport     US\$ 610,00     US\$ 101,67     ml 125 / 6 precast elements       Assembly     US\$ 610,00     US\$ 101,67     ml 125 / 6 precast elements       Assembly     US\$ 101,67     ml 125 / 6 precast foundations x 1 hour (2 unskilled workers + 1 crane)       Minimum sales price with transport and assembly     US\$ 1.547,46     US\$ 1.547,46       Assembly system foundations x 1 concept and assembly     Image: second assembly second assembly     Image: second assembly second assembly       Assembly system foundations     nr     4     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler       Column-Foundation)     nr     4     US\$ 1,547,66     South overhead costs and business profits)       Activities     nr     4     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler       Column-Foundation)     nr     4     US\$ 1,2,50     US\$ 648,76     Fck 30 N/mm '54		Overhead costs					US\$	232.11	30%
Minimum exworks sales price     US\$1.257,26     Coefficient 1,25 (The cost includes business profits)       Amortization of the formworks     US\$ 127,53     10%       Royatty     US\$ 127,53     10%       Transport     US\$ 610,00     US\$ 101,67     ml 25 / 6 precast elements       Assembly     US\$ 610,00     US\$ 43,00     4 precast foundations x i hour (2 unskilled workers + 1 crane)       Minimum sales price with transport and assembly     US\$ 127,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler       Courter in situ     nr     4     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler       Courter in situ     ft <sup>3</sup> 386,98     US\$ 0,19     US\$ 73,53     12,2×12,2×2,61 ft (with overhead costs and business profits)       Activities     Excavation     ft <sup>3</sup> 386,98     US\$ 0,13     US\$ 648,76     Rck 30 Nrms* 24 (with overhead costs and business profits)	Minimum exworks sales price     US\$1.257,26     Coefficient 1,25 (The cost includes business profits)       Amortization of the formworks     US\$ 18,00     US\$ 127,53     10%       Royalty     US\$ 610,00     US\$ 127,53     10%       Transport     US\$ 610,00     US\$ 101,67     ml 125 / 6 precast elements       Assembly     US\$ 610,00     US\$ 43,00     4 precast foundations x 1 hour (2 unskilled workers + 1 crane)       Minimum sales     Minimum sales     US\$ 1.547,46     US\$ 1.547,46       Minimum sales     Image: sembly system (Column-Foundations x 1 hour (2 unskilled workers + 1 crane)     US\$ 1.2,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler Threaded Coupler foundation)       Assembly system (Column-Foundation)     nr     4     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler foundation)       Minimum sales     Image: sembly system (Column-Foundation)     nr     4     US\$ 12,50     US\$ 50,00     4 Anchor Bolts and 8 Threaded Coupler foundation)       Concrete in situ     ft <sup>3</sup> 386,98     US\$ 0,19     US\$ 73,53     12,2×12,2×2,6 ft (with overhead costs and business profits)       UT IN THE WORKSITE     Eackfilling     ft <sup>3</sup> 43,13 <td< td=""><td></td><td>Total costs</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></td<>		Total costs						-	
Ite formworks     US\$     10.00       Royalty     US\$     127,53     10%       Transport     US\$     610,00     US\$     101,67     ml 125 / 6 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\$     1.547,46       Assembly system (Column- Foundation)     nr     4     US\$     12,50     US\$     50,00     4 Anchor Bolts and 8 Threaded Coupler       Activities transport and assembly system (Column- Foundation)     nr     4     US\$     12,50     US\$     50,00     4 Anchor Bolts and 8 Threaded Coupler       Activities transport and assembly system (Column- Foundation)     nr     4     US\$     12,50     US\$     50,00     4 Anchor Bolts and 8 Threaded Coupler       Activities transport and assembly system (Column- Foundation)     nr     4     US\$     12,50     US\$     50,00     4 Anchor Bolts and 8 Threaded Coupler       Activities transport is our head costs and business profits)     ft³     386,98     US\$     0,19     US\$     648,76     Rck 30 N/mm² S4 (with overhead c	the formworks     US\$     1,00       Royalty     US\$     127,53     10%       Transport     US\$     610,00     US\$     101,67     ml 125 / 6 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\$     1.547,46     US\$1.547,46       Assembly system (Column-Foundation)     nr     4     US\$1.547,46     US\$1.547,46       Activities     Assembly system (Column-Foundation)     nr     4     US\$1.547,46     US\$1.547,46       Activities     Concrete in situ     ft³     386,98     US\$1.547,66     Chromed costs and business profits)       UT in THE WORKSITE     Excavation								-	cost includes business
Transport   US\$ 610,00   US\$ 101,67   ml 125 / 6 precast elements     Assembly   US\$ 610,00   US\$ 101,67   ml 125 / 6 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\$ 1.547,46     Assembly system (Column-Foundation)   nr   4     Assembly system (Column-Foundation)   nr   4     Excavation   ft³   386,98   US\$ 0,19   US\$ 73,53   12,2×12,2×2,6 ft (with overhead costs and business profits)     Concrete in situ   ft³   246,68   US\$ 2,63   US\$ 648,76   Rck 30 N/mm² S4 (with overhead costs and business profits)     Backfilling   ft³   43,13   US\$ 0,13   US\$ 5,39   Excavation - Foundation ft overhead costs and business profits)	Image: Constraint of the second se							US\$	18,00	
Assembly   Assembly   US\$ 43,00   4 precast foundations x 1 hour (2 unskilled workers + 1 crane)     Minimum sales price with transport and assembly   US\$ 1.547,46   US\$1.547,46     Assembly system (Column- Foundation)   nr   4   US\$ 12,50   US\$ 50,00   4 Anchor Bolts and 8 Threaded Coupler     Activities Concrete in situ   ft³   386,98   US\$ 0,19   US\$ 73,53   12,2×12,2×2,2.6 ft (with overhead costs and business profits)     Activities Concrete in situ   ft³   246,68   US\$ 2,63   US\$ 648,76   Rck 30 Nmm² S4 (with overhead costs and business profits)     Backfilling   ft³   43,13   US\$ 0,13   US\$ 5,39   Excavation - Foundation (with overhead costs and business profits)	Assembly   Assembly   US\$ 43,00   4 precast foundations x 1 hour (2 unskilled workers + 1 crane)     Minimum sales price with transport and assembly   US\$ 1.547,46   US\$ 1.547,46     Assembly system (Column- Foundation)   nr   4   US\$ 12,50   US\$ 50,00   4 Anchor Bolts and 8 Threaded Coupler     Activities CARRED WORKSITE   Excavation   ft³   386,98   US\$ 0,19   US\$ 73,53   12,2×12,2×2,6 ft (with overhead costs and business profits)     Activities CARRED WORKSITE   Concrete in situ   ft³   246,68   US\$ 2,63   US\$ 648,76   Rck3 0 N/mr2 S4 (with overhead costs and business profits)		Royalty					US\$	127,53	10%
Minimum sales price with transport and assembly   Minimum sales price with transport and assembly   US\$1.547,46     Minimum sales price with transport and assembly   US\$1.547,46     Assembly system (Column- Foundation)   nr   4   US\$ 12,50   US\$ 50,00   4 Anchor Bolts and 8 Threaded Coupler     Activities CARRED UVI in THAT ARE CARRED UVI in THE WORKSITE   Excavation   ft³   386,98   US\$   0,19   US\$   73,63   12,2×12,2×2,6 ft (with overhead costs and business profits)     Minimum sales price with transport and assembly system (Column- Foundation)   ft³   386,98   US\$   0,19   US\$   73,63   12,2×12,2×2,6 ft (with overhead costs and business profits)     Minimum sales (Column- Foundation)   ft³   246,68   US\$   2,63   US\$   648,76   Rck 30 N/mm² 54 (with overhead costs and business profits)	Minimum sales price with transport and assembly   Minimum sales price with transport and assembly   US\$1.547,46     Minimum sales price with transport and assembly   US\$1.547,46     Assembly system (Column- Foundation)   nr   4   US\$ 12,50   US\$ 50,00   4 Anchor Bolts and 8 Threaded Coupler     Assembly system (Column- Foundation)   nr   4   US\$ 12,50   US\$ 73,53   12.2×12.2×2.6 ft (with overhead costs and business profits)     ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE   Excavation   ft³   386,98   US\$ 2,63   US\$ 648,76   Rck 30 N/mr2 S4 (with overhead costs and business profits)     Backfilling   ft³   43,13   US\$ 0,13   US\$ 5,39   Excavation - Foundatior (with overhead costs and business profits)		Transport			US\$ (	610,00	US\$	101,67	
price with transport and assembly   price with transport and assembly   price with transport and assembly     Assembly system (Column- Foundation)   nr   4   US\$   12,50   US\$   50,00   4 Anchor Bolts and 8 Threaded Coupler     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   386,98   US\$   0,19   US\$   73,53   12,2×12,2×2,6 ft (with overhead costs and business profits)     Backfilling   ft³   246,68   US\$   2,63   US\$   648,76   Rck 30 N/mm² 54 (with overhead costs and business profits)	Image: price with transport and assembly   Image: price with transport and assembly   Image: price with transport and assembly     Image: price with transport and assembly   Image: price with transport and assembly   Image: price with transport and assembly     Image: price with transport and assembly   Image: price with transport and assembly   Image: price with transport and assembly     Image: price with transport and assembly   Image: price with transport and assembly   Image: price with transport and assembly     Image: price with transport and assembly system (Column-Foundation)   Image: price with transport and tran		Assembly					US\$	43,00	1 hour (2 unskilled
Image: Column-Foundation   Image: Column-F	Image: Column-Foundation)   Image:		price with transport and					US\$1	1.547,46	
Image: Column-Foundation   Image: Column-F	Image: Column-Foundation   Image: Column-F									
ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE Concrete in situ Excarried OUT IN THE ft <sup>3</sup> 246,68 US\$ 2,63 US\$ 648,76 Rck 30 N/mm <sup>2</sup> S4 (with overhead costs and business profits)   Backfilling ft <sup>3</sup> 43,13 US\$ 0,13 US\$ 5,39 Excavation - Foundation (with overhead costs and business profits)	ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE Concrete in situ Concrete in situ ft <sup>3</sup> 246,68 US\$ 2,63 US\$ 648,76 Rck 30 N/mm <sup>2</sup> S4 (with overhead costs and business profits)   Backfilling ft <sup>3</sup> 43,13 US\$ 0,13 US\$ 5,39 Excavation - Foundation (with overhead costs and business profits)		(Column-	nr	4	US\$	12,50	US\$	50,00	
THAT ARE CARRIED OUT IN THE WORKSITE Concrete in situ Backfilling ft <sup>3</sup> 246,68 US\$ 2,63 US\$ 648,76 Fick 30 (V/min 54 (win overhead costs and business profits)   Backfilling ft <sup>3</sup> 43,13 US\$ 0,13 US\$ 5,39 Excavation - Foundation (with overhead costs and business profits)	THAT ARE CARRIED OUT IN THE WORKSITE Concrete in studing (in the state in studing) ft <sup>3</sup> 246,68 US\$ 2,63 US\$ 648,76 Rok 30 (in/min) 54 (with overhead costs and business profits)   Backfilling ft <sup>3</sup> 43,13 US\$ 0,13 US\$ 5,39 Excavation - Foundation (with overhead costs and business profits)		Excavation	ft³	386,98	US\$	0,19	US\$	73,53	overhead costs and
WORKSITE     Backfilling     ft³     43,13     US\$     0,13     US\$     5,39     Excavation - Foundation (with overhead costs and business profits)	WORKSITE     Backfilling     ft³     43,13     US\$     0,13     US\$     5,39     Excavation - Foundation (with overhead costs and business profits)	THAT ARE CARRIED	Concrete in situ	ft³	246,68	US\$	2,63	US\$	648,76	overhead costs and
	TOTAL PRICE US\$2.325,13		Backfilling	ft3	43,13	US\$	0,13	US\$	5,39	(with overhead costs
	TOTAL PRICE US\$2.325,13									

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	WI		RADITIONA CAST POC					NG 11.50 x 2,3 ft
	ITEM	U. M.	QUANTITY	US\$ /	/ U. M.	C	COST	NOTE
	Steel - Reinforcing bars (Precast Pocket)	lb	610	US\$	0,44	US\$	268,40	Fe B 44 k (The cost does not include overhead costs and business profits)
PRECAST POCKET	Factory produced concrete (Precast Pocket)	ft³	66,24	US\$	1,80	US\$	119,23	Pocket (5,6×5,6×3,6) ft Rck 30 N/mm <sup>2</sup> S4 (The cost does not include overhead costs and business profits)
	Labor	Hours	4	US\$	30,55	US\$	122,20	
	Total					US\$	509,83	
	Overhead costs					US\$	152,95	30%
	Total costs					US\$	662,78	
	Minimum ex- works sales price					US\$	828,48	Coefficient 1,25 (The cost includes business profits)
	Amortization of the formworks					US\$	18,00	
	Transport			US\$6	610,00	US\$	101,67	ml 125 / 6 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\$	991,14	
	Excavation (Precast Pocket)	ft³	617,80	US\$	0,19	US\$	117,38	13,1x13,1x3,6 ft (with overhead costs and business profits)
	Excavation (footing base)	ft³	446,19	US\$	0,19	US\$	84,78	13,1×13,1×2,6 ft (with overhead costs and business profits)
	Formwork (footing base)	ft²	105,80	US\$	3,05	US\$	322,69	11,5x2,3x4 (with overhead costs and business profits)
	Steel - Reinforcing bars (footing base)	lb	1653	US\$	0,61	US\$	1.008,33	Fe B 44k 6,7 lb/ft <sup>3</sup> (with overhead costs and business profits)
THAT ARE CARRIED OUT IN THE WORKSITE	Concrete in situ (footing base)	ft³	304,18	US\$	2,63	US\$	799,98	Footing base 11,5×11,5×2,3 ft (with overhead costs and business profits)
	Backfilling (Precast Pocket)	ft³	504,90	US\$	0,13	US\$	63,11	Excavation - Pocket (with overhead costs and business profits)
	Backfilling (footing base)	ft³	102,34	US\$	0,13	US\$	12,79	Excavation - Footing base (with overhead costs and business profits)
	Mortar for filling between column and pocket	ft³	14,26	US\$	2,63	US\$	37,49	
		TOTAL	PRICE			US\$	3.437,70	
	PER	CENTA	GE SAVINGS				32%	
	SAVING MADE E		G OUR CON	STRUC	CTION	US\$	1.112,57	
								ļ

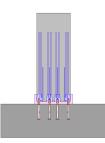


## CONSTRUCTION SYSTEMS COMPARISON - COST ANALYSIS -Precast PAD Foundation VS Traditional cast-in-place footing with connection systems such as PEIKKO or HALFEN

			IONAL CAS					BOLTED x 11.50 x 2,3 ft
	ITEM	U. M.	QUANTITY	US\$	/ U. M.	(	COST	NOTE
	Steel - Reinforcing bars (footing base)	lb	1653	US\$	0,61	US\$	1.008,33	Fe B 44k 6,7 lb/ft³ (with overhead costs and business profits)
	Formwork (footing base)	ft²	105,80	US\$	3,05	US\$	322,69	11,5x2,3x4 (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 pourin
	Additional reinforcing bars to join the Jig to the footing reinforcing cage	lb	77	US\$	0,61	US\$	46,97	Fe B 44 k (with overhead costs and business profits)
ACTIVITIES THAT ARE CARRIED OUT IN THE WORKSITE								
	Connection systems (Column- Foundation)	nr	12	US\$	84,00	US\$	1.008,00	Anchor Bolts and Column Shoes
	Excavation (footing base)	ft3	446,19	US\$	0,19	US\$	84,78	13,1×13,1×2,6 ft (with overhead costs and business profits)
	Concrete in situ (footing base)	ft³	304,18	US\$	2,63	US\$	799,98	Footing base 11,5×11,5×2,3 ft (with overhead costs and business profits)
	Backfilling (footing base)	ft³	102,34	US\$	0,13	US\$	12,79	Excavation - Footing base (with overhead costs and business profits)
		тоти	AL PRICE			US\$	3.501,54	
	PE	RCENT	AGE SAVING	s			34%	
	0.01		E BY USING				1.176,41	

		11000		oun	uulioi	110 1144	ilional cast-in-pi
	PRE	ECAST			N (FOC 1.50 x 2	TING) - MC 2,3 ft	NACHINO
V V	ITEM	U. M.	QUANTITY	US\$	/ U. M.	COST	NOTE
PRECAST	Steel - Reinforcing bars (only bent - our production process does not need rebars binding)	lb	1653	US\$	0,35	US\$578,55	Fe B 44k 6,7 lb/ft <sup>3</sup> (The cost does not include overhead costs and business profits)
PAD FOUNDATION (FOOTING)	Factory produced concrete	ft <sup>3</sup>	57,50	US\$	1,80	US\$103,50	Rck 30 N/mm <sup>2</sup> S4 (The cost does not include overhead costs and business profits)
	Labor	Hours	3	US\$	30,55	US\$ 91,65	
	Total					US\$773,70	
	Overhead costs					US\$232,11	30%
	Total costs					US\$1.005,8	
	Minimum ex- works sales price					US\$1.257,2	Coefficient 1,25 (The cost includes business profits)
	Amortization of the formworks					US\$ 18,00	
	Royalty					US\$127,53	10%
	Transport			US\$	610,00	US\$101,67	ml 125 / 6 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\$1.547,4	
	Assembly system (Column- Foundation)	nr	4	US\$	12,50	US\$ 50,00	4 Anchor Bolts and 8 Threaded Coupler
	Excavation	ft3	386,98	US\$	0,19	US\$ 73,53	12,2×12,2×2,6 ft (with overhead costs and business profits)
ACTIVITIES THAT ARE CARRIED OUT IN THE	Concrete in situ	ft³	246,68	US\$	2,63	US\$648,76	Rck 30 N/mm <sup>2</sup> S4 (with overhead costs and business profits)
WORKSITE	Backfilling	ft³	43,13	US\$	0,13	US\$ 5,39	Excavation - Foundation (with overhead costs and business profits)
				1			

This solution is not recommended for Seismic Zones





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

		PR	ECAST	PAD FOUN 11.		ON (FOC 1.50 x 2		) - MOI	NACHINO
	<i>y</i> 1	ITEM	U. M.	QUANTITY	US\$	/ U. M.	C	OST	NOTE
		Steel - Reinforcing bars (only bent - our production process does not need rebars binding)	lb	1653	US\$	0,35	US\$	578,55	Fe B 44k (The cost does not include overhead costs and business profits)
	PRECAST PAD FOUNDATION (FOOTING)	Factory produced concrete	ft³	57,50	US\$	1,80	US\$	103,50	Rck 30 N/mm <sup>2</sup> S4 (The cost does not include overhead costs and business profits)
		Labor	Hours	3	US\$	30,55	US\$	91,65	
_		Total					US\$	773,70	
		Overhead costs					US\$	232,11	30%
		Total costs					US\$1	.005,81	
		Minimum ex- works sales price					US\$1	.257,26	Coefficient 1,25 (The cost includes business profits)
		Amortization of the formworks					US\$	18,00	
		Royalty					US\$	127,53	10%
		Transport			US\$	610,00	US\$	101,67	ml 125 / 6 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\$1	.547,46	
		Assembly system (Column- Foundation)	nr	4	US\$	12,50	US\$	50,00	4 Anchor Bolts and 8 Threaded Coupler
		Excavation	ft3	386,98	US\$	0,19	US\$	73,53	12,2×12,2×2,6 ft (with overhead costs and business profits)
	ACTIVITIES THAT ARE CARRIED OUT IN THE	Concrete in situ	ft3	246,68	US\$	2,63	US\$	648,76	Rck 30 N/mm <sup>2</sup> S4 (with overhead costs and business profits)
	WORKSITE	Backfilling	ft3	43,13	US\$	0,13	US\$	5,39	Excavation - Foundation (with overhead costs and business profits)
			TOTAL	PRICE			US\$2	.325,13	

1	-										
			DITIONAL ( CORRUGA								
	ITEM	U. M.	QUANTITY	US\$	/ U. M.	c	OST	NOTE			
	Steel - Reinforcing bars (footing base)	lb	1653	US\$	0,61	US\$	1.008,33	Fe B 44k (with overhead costs and business profits)			
	Formwork (footing base)	ft²	119,60	US\$	3,05	US\$	364,78	11,5x2,6x4 (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			
ACTIVITIES THAT ARE CARRIED											
OUT IN THE WORKSITE											
	Connection systems (Column- Foundation)	nr	4	US\$	49,00	US\$	196,00	Anchor Bolts and Column Shoes			
	Excavation (footing base)	ft³	514,83	US\$	0,19	US\$	97,82	13,1×13,1×3 ft (with overhead costs and business profits)			
	Concrete in situ (footing base)	ft <sup>3</sup>	343,85	US\$	2,63	US\$	904,33	Footing base 11,5×11,5×2,6 ft (with overhead costs and business profits)			
	Backfilling (footing base)	ft³	118,08	US\$	0,13	US\$	14,76	Excavation - Footing base (with overhead costs and business profits)			
		тот	AL PRICE			US\$3	3.235,01				
	PE	RCENT	AGE SAVING	s			28%				
			E BY USING			US\$	909,88				

