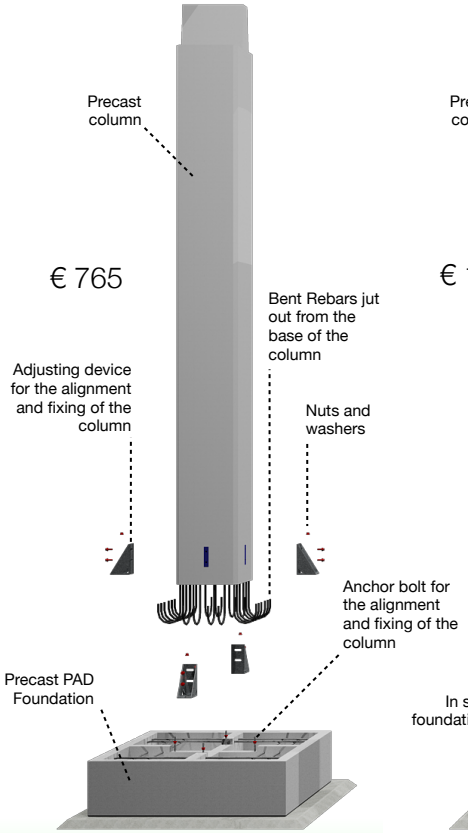
Comparison of different connection systems (Column-foundation) - Methods of fixing a precast column to a base - Base size 2.50 x 2.50 x 0.50 m

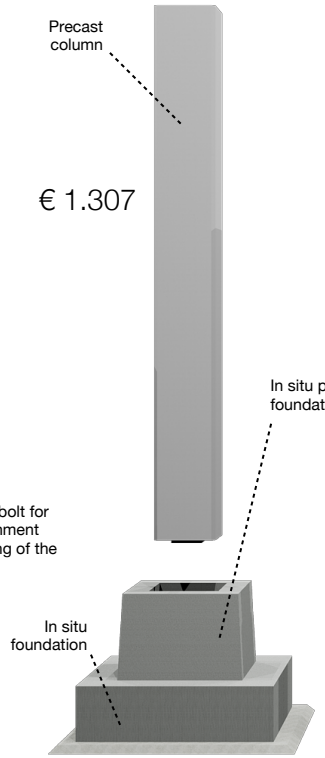
Precast PAD foundation Monachino



Advantages

1. The most economical by far
2. Saving on construction costs
3. Fast assembly
4. Perfect connection between column and foundation
5. Pinpoint precision
6. Reduction of the foundation rebars
7. Lowering of the foundation thickness
8. Greater job site safety for workers

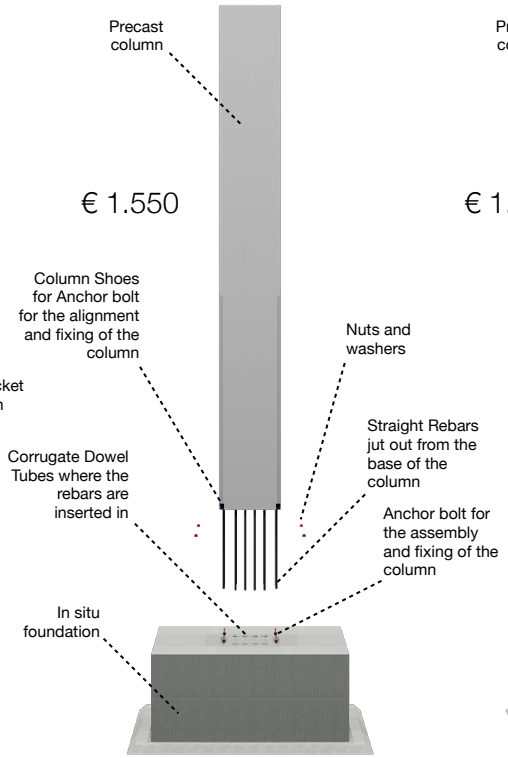
In situ Pocket Foundation



Disadvantages

1. Expensive
2. It requires the construction of the pocket foundation
3. Cast-in-place in two-step
4. Any different column needs different pocket
5. The construction time is extremely long
6. It requires: skilled manpower, tools and formwork
7. The adjustment of the column is very slow

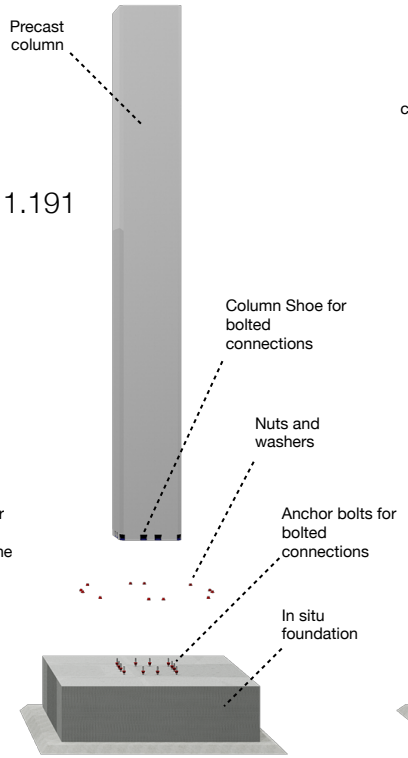
In situ foundation with starter-bars and dowel tubes



Disadvantages

1. Expensive
2. Increase of the foundation thickness in order to ensure a proper concrete cover of the column rebars
3. It requires the production, the assembly and fixing of the dowel tubes and respective jig
4. It requires very expensive and expansive mortar
5. Construction system very slow
6. It requires: skilled manpower, tools and formwork

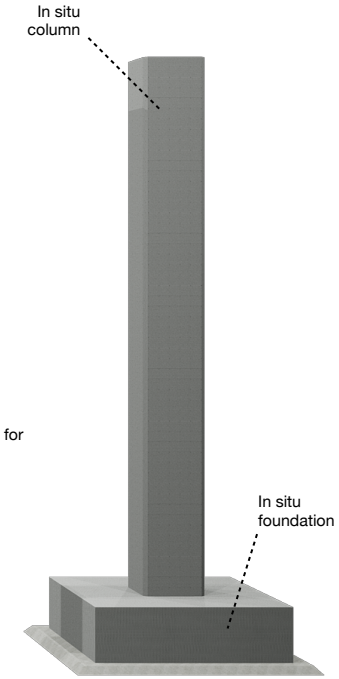
Bolted or Baseplate connection (such as Peikko/Halfen)



Disadvantages

1. Expensive
2. It requires very expensive connection devices: column shoes and anchor bolts
3. Very difficult adjustment and fixing of the jig
4. It requires very expensive and expansive mortar
5. Construction system very slow
6. It requires: skilled manpower, tools and formwork
7. Anchor bolts need extra rebars

In situ foundation and column (conventional)

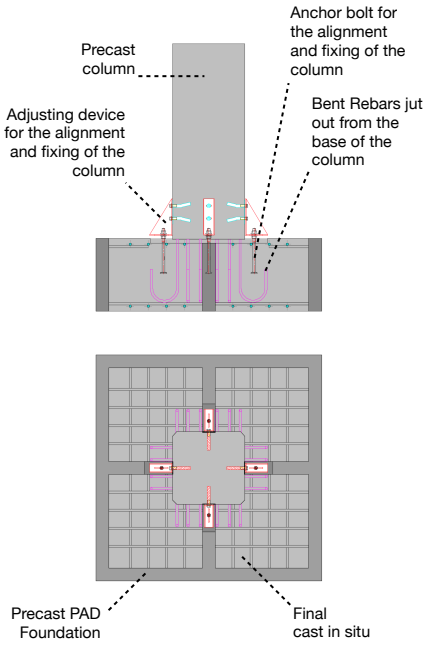


Disadvantages

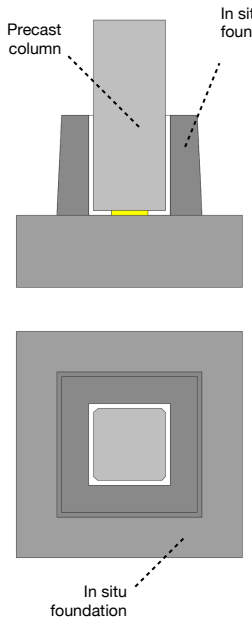
1. The most expensive
2. Large amount of skilled manpower, tools and formwork
3. The construction time is extremely long
4. Overlapping of the reinforcements in critical area
5. No precision

Comparison of different connection systems (Column-foundation) - Methods of fixing a precast column to a base - Base size 2.50 x 2.50 x 0.50 m

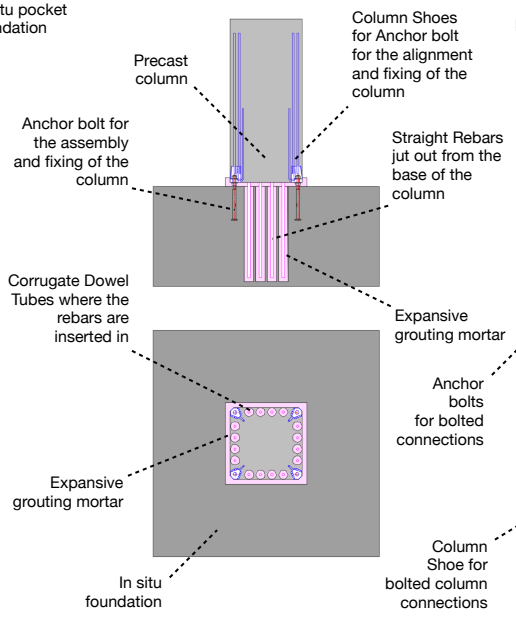
Precast PAD foundation Monachino



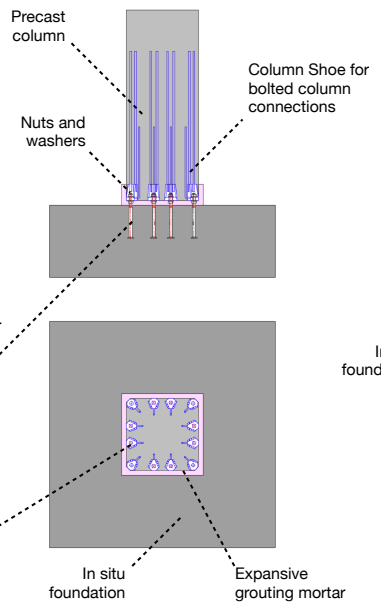
In situ Pocket Foundation



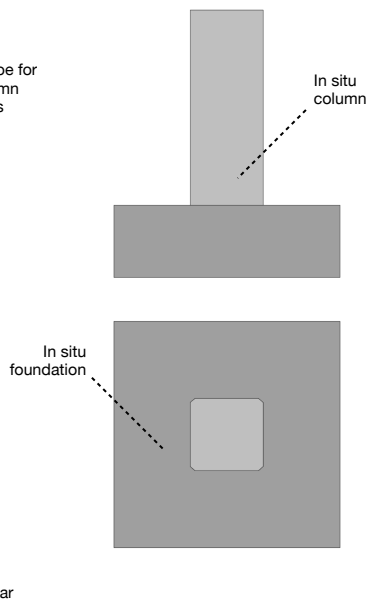
In situ foundation with starter-bars and dowel tubes

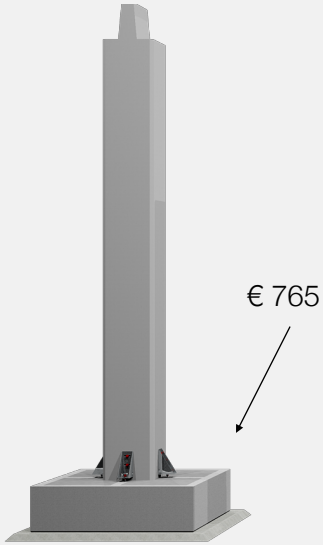


Bolted or Baseplate connection (such as Peikko/Halfen)



In situ foundation and column (conventional)





€ 765

€ 1.307

€ 1.550

€ 1.191