

CASE STUDY: New Premier Inn & Brewers Fayre Pub Cleethorpes

Our Client: BCJ Ltd, Killingholme, UK.

Contract: New Premier Inn & Brewers Fayre pub

Main Contractor: R G Carter (Building) Ltd.

Scope of works: Construct lift shaft pit to new Premier Inn Hotel.

Site address: Premier Inn & Brewers Fayre pub, Cleethorpes, N.E.Lincs.

Brief:

Construct a new 4.15m x 3.15m x 1.3m high lift pit, project is on the critical path as brickwork trades need to follow on a tight program. Only 3 days allowed for erection / striking.

Other methods of construction considered was traditional timber shuttering and panel systems.

Costs are shown for skilled and unskilled labour as Fast-Form can be fitted by labourer's in many cases which can be an additional cost saving, this job was completed by one skilled and one unskilled.

Reason for rejection of alternate methods:

Traditional formwork would have taken at least 2 days to make the shutters and a further 3 days to fit them, also more expensive.

Panel System: No crane so heavy panels could not be lifted in or out, panel sizes did not fit, would have taken 3 days to erect (with crane) and also more expensive.

Shutters erected in 1 ½ days, picture is pre-pour



Next day, shutters removed in just 2 hours and brickwork commenced.



Fast Form cost breakdown (Cost for traditional formwork shown in RED)

4.2m x 3.1m by 1.3m high lift pit (Double sided on an existing slab – area of formwork	= 37m ²
40 no D brackets at £7/ week each / ONLY ONE USE (2 uses per week easily achievable)	=£15.13/m ²
8 no 1.2m Corners at £5 / week each 2 week min hire	=£2.16/m ²
Erect formwork 2 groundworkers 12hrs each= (2 No x £13 / hr x 12 hours) / 37 m ²	= £8.43/m ²
Strip formwork 2 groundworkers in 2 hours = (4 x 13) / 37	= £1.40/m ²
Plywood say £3/m ² including screws and cleaning	= <u>£3.00/m²</u>
Using 2 Ground workers	£30.12/m ² (29% saving)
Using 2 joiners	£33.91/m ² (21% saving)
Traditional	£43.00 / m²

Now we look at re-usage there are 4 more lift pits to do so 5 in total over the 2 week hire period:

4.2m x 3.1m by 1.3m high lift pit (Double sided on an existing slab – area of formwork = 37m² x 5 = 185 m²
40 no D brackets at £7/ week each x 2 week / 5 uses per week easily achievable) =£3.02/m²
8 no 1.2m Corners at £5 / week each 2 week min hire =£.43/m²
Erect formwork 2 groundworkers 12hrs each= (2 No x £13 / hr x 12 hours) / x 5 / 185m² = £8.43/m²
Strip formwork 2 groundworkers in 2 hours = (4 x 13) / x 5 / 185m² = £1.40/m²
Plywood say £3/m² including screws and cleaning =£3.00/m²

Using 2 Ground workers £16.28/m² (62% saving)

Using 2 joiners £20.07/m² (53% saving)

Traditional £43.00 / m²

