SHELL COSTS	£	£/m² GIFA	%
Substructure	**2,867,500**	**127.44**	**6.04%**
Excavation for footings, bases and filling to levels; limited off site disposal 9,250m² @ £42			
Piled foundations, pile caps, piling mat 9,250m² @ £95			
Suspended reinforced concrete slab,typically 275mm thick, ground beams, insulation and DPM 9,250m² @ £125			
Allowance for gas membrane to building footprint 9,250m² @ £36			
Allowance for below-ground ducts, pits and sumps 9,250m² @ £12			
Frame and upper floors	**4,189,800**	**186.21**	**8.82%**
Structural steelwork, columns and beams generally including erection and surface treatments 450t @ £1,450			
Structural steelwork, UC section columns, fabricated plate sections to take arena cantilevers, average rate including erection and surface finishes 300t @ £1,600			
Structural steelwork, fabricated plate girder and UB arena raker/cantilever beams, including erection and surface finishes 300t @ £2,100			
Intumescent paint 750t @ £400			
200mm thick precast concrete slabs with structural concrete topping 5,250 @ £125			
Composite metal deck with insitu reinforced concrete filling 2,300m² @ £100			
Precast concrete L-shaped units to arena rake, 875mm x 474mm high on locating pins, sealed joints 5,705m² @ £200			
Allowance for secondary steelwork, trimming to openings, etc., item @ £100,000			
Roof	**4,197,400**	**186.55**	**8.84%**
Steel roof structure; fabricated trusses spanning 60m, walkways and rigging grid. Average weight 75kg/m². Rate includes temporary works for final on-site assembly, erection and paint system 700t @ £2,500			
Composite standing seam roof system on structural decking and secondary steelwork,including lining and thermal insulation, rate enhanced for additional dead loads for acoustic insulation 9,250m² @ £120			
Extra for horizontal and vertical acoustic lining to arena roof 8,850m² @ £70			
Allowance for service yard roof including acoustic treatment 2,000m² @ £130			
Allowance for feature canopies to box office and entrances, structural glazing, item @ £50,000			
Extra for rooflights and roof vents, item @ £75,000			
Allowance for roof detailing, abutments, eaves and upstands 360m @ £260			
Mansafe system, item @ £35,000			
Rainwater installations to main roof and canopies, complete 11,350m² @ £18			

	£	£/m² GIFA	%
Stairs	**1,047,400**	**46.55**	**2.21%**
Reinforced concrete stairs and landings with float finish and non-slip inserts 420m² @ £600			
Feature stairs to VIP and club areas; architectural steelwork 75m² @ £1,000			
Precast step units to form gangway steps on seating aisles 1,000nr @ £60			
Precast step units to vomitories, cross aisles, etc. 100m² @ £550			
Stairs and ladders to roof and roof walkway access, plant room stairs and catwalks, item @ £25,000			
Balustrades and central division rails designed to assembly load criteria, average rate for finishes including galvanised or stainless steel, polyester powder coating, etc., 560m @ £460			
Staircase handrails; average rate 560m @ £130			
Internal and external safety handrails, gantries, walkway guardrails; galvanised steel 1,250m @ £200			
External walls, windows and doors	**5,066,600**	**225.18**	**10.67%**
Insulated masonry wall to service level, architectural blockwork, including allowance for windposts, etc. 2,000m² @ £200			
Composite insulated metal cladding panels on cladding rails (blockwork substrate measured separately) 7,000m² @ £230			
Curtain walling with 40% glazing and metal transom panels; stick system 3,000m² @ £450			
Allowance for feature elevation in Structural glass walling 500m² @ £600			
Aluminium louvres 520m² @ £380			
Allowance for solar shading and other elevation features, item @ £100,000			
Allowance for blockwork backing and lining walls to cladding, windposts 9,000m² @ £45			
Cladding to soffits and eaves 1,100m² @ £180			
Main entrance doors in laminated glazing 28nr @ £10,000			
Extra over metal cladding for double doorsets 10nr @ £5,000			
General fire escape and plant room doors and frames, ironmongery, average rate per leaf 76nr @ £1,500			
Power operated insulated shutters to service yard 200m² @ £310			

SHELL COSTS	£	£/m² GIFA	%
Internal walls and partitions	**1,900,000**	**84.44**	**4.00%**
200mm thick concrete walls forming vomitories and upstands within seating bowl 1,000m² @ £250			
140 mm blockwork in dividing walls and partitions, up to 6m high including lateral and vertical restraint 19,000m² @ £60			
Drywall partition, generally 1 hour FR 900m² @ £60			
Aluminium framed glazed screens 800m² @ £360			
WC cubicles - vandal resistant 300nr @ £560			
Internal doors	**1,426,300**	**63.39**	**3.00%**
High quality solid core veneer doors and frames, stainless steel ironmongery, to premium areas, rate for single leaf 80nr @ £1,500			
Solid core laminate faced or steel doors and frames, stainless steel ironmongery, in front and back of house areas, average rate for single leaf 460nr @ £1,200			
Duct and service riser doors 32nr @ £1,000			
Sliding timber faced folding partitions, 3.0m high 386m² @ £800			
Glazed openable screens to suites and boxes 400m² @ £580			
Fire and security shutters to concessions, bars and area segregation 550m² @ £330			
Wall finishes	**346,300**	**15.39**	**0.73%**
Ceramic tiling on render 550m² @ £75			
Emulsion paint on plaster 3,000m² @ £15			
Decorative coverings on plaster 1,000m² @ £40			
Paint concrete or masonry 14,000m² @ £5			
Allowance for panelling and other decorative finishes Item @ £150,000			
Floor finishes	**614,300**	**27.30**	**1.29%**
Carpet, various grades, including levelling screed and skirtings, average rate used 2,020m² @ £40			
Vinyl sheet, various grades, including levelling screed and skirtings 1,500m² @ £35			
Stone / terrazzo flooring including screed and skirtings 480m² @ £200			
Ceramic tiling including screed and skirtings 500m² @ £100			
Epoxy floor coatings and sealers, various grades, to Arena floor, plant areas etc, average rate used 15,000m² @ £18			
Entrance matwells and mats 130m² @ £500			
Ceiling finishes	**495,000**	**22.00**	**1.04%**
Egg crate and tile suspended ceilings, average rate used 1,100m² @ £50			
Plasterboard suspended ceiling on MF with skim finish and edge trim 2,500m² @ £35			
Sealer to structural soffits 12,250m² @ £10			
Allowance for special finishes, bulkheads, smoke curtains and suspended features Item @ £230,000			
Furniture and fittings	**3,488,500**	**155.04**	**7.34%**
Fixed padded seating to general admission areas 7,500nr @ £75			
Fixed padded seating with arms to club areas 800nr @ £95			
Fixed upholstered seating with arms to suites 200nr @ £180			
Retractable/moveable seating systems to front of lower bowl 1,500nr @ £350			
Safety rails and barriers to fixed seating bowl 2,000m @ £350			
Vanitory units, item @ £150,000			
Integrated plumbing systems, back panels and duct casings 600nr @ £500			
Signage; safety, directional and statutory, item @ £90,000			
Fixtures and fittings to toilets, changing rooms, dressing rooms and offices, item @ £200,000			
Fit out and fixed furnishings to suites, lounges, bars and club areas, item @ £220,000			
Glass division screens, upstands and shelves to suites 20nr @ £3,200			
Drinks rails, shelves and queuing rails to concourse areas, item @ £50,000			
General fixtures and fittings, item @ £75,000			
Catering fit out including fixed equipment only to kitchens, concessions and restaurants, item @ £440,000			

	£	£/m² GIFA	%
Sanitary installation	**431,000**	**19.16**	**0.91%**
Fittings generally 940nr @ £400			
Showers 50nr @ £1,100			
Disposal installations	**683,800**	**30.39**	**1.44%**
Below ground drainage pipework, chambers, pumps and attenuation 9,250m² @ £35			
Above ground waste, soil and vent pipework 22,500m² @ £16			
Water installations	**702,000**	**31.20**	**1.48%**
Mains water supplies, storage and distribution 22,500m² @ £5			
Central boilers, flue, pumps, pressurisation and calorifiers 22,500m² @ £9			
Hot and cold water distribution, complete 22,500m² @ £16			
Local hot water heaters to toilets and concessions, item @ £27,000			
Space heating and air treatment	**4,070,000**	**180.89**	**8.57%**
LPHW distribution and emitters, generally 22,500m² @ £18			
Air handling, supply and extract to arena bowl and concourses 14,500m² @ £130			
Air handling, extract and heating to general areas 8,000m² @ £120			
Chilled water plant room and distribution, serving suites and club lounges only 4,000m² @ £20			
Chiller installation, item @ £75,000			
Local cooling units, item @ £50,000			
Door curtains to entrances, item @ £75,000			
Extract ventilation to toilets, kitchens and concessions 2,500m² @ £100			
Smoke extract installations 14,500m² @ £20			
Electrical installations	**3,507,500**	**155.89**	**7.38%**
HV installations 22,500m² @ £14			
Standby generators and UPS systems, item @ £150,000			
LV distribution including show supplies 22,500m² @ £35			
General LV power 17,500m² @ £10			
Power to lifts, mechanical plant, seating and operator's equipment, item @ £125,000			
Allowance for containment 17,500m² @ £14			
Lighting installations generally including feature lighting 17,500m² @ £45			
Emergency lighting 22,500m² @ £15			
Arena bowl lighting 6,000m² @ £35			
Stage and gantry bus bars, panels and lighting installations, item @ £200,000			
External facade lighting, item @ £75,000			
Specialist lighting controls, item @ £100,000			
Gas installations	**30,000**	**1.33**	**0.06%**
Incoming gas supply and distribution, item @ £30,000			
Lift installations	**600,000**	**26.67**	**1.26%**
Electro-hydraulic 2,500kg passenger/goods lift serving 4 levels 4nr @ £110,000			
Electro-hydraulic 1,000kg passenger/goods lift serving 4 levels 2nr @ £80,000			
Protective installations	**555,000**	**24.67**	**1.17%**
Earthing and bonding and lightning protection 22,500m² @ £4			
Sprinkler installations 17,500m² @ £22			
Hose reel and dry riser installations, item @ £80,000			
Communications installations	**2,215,000**	**98.44**	**4.66%**
Fire alarm and smoke detection interfaced to PA system 22,500m² @ £15			
Public address and digital music broadcast system 22,500m² @ £22			
TV ariel, cable installation, including digital distribution equipment, item @ £125,000			
Card access and intruder alarm system, item @ £125,000			
CCTV system including IP interface 22,500m² @ £10			
Fibre backbone and ICT infrastructure including an allowance for data points, item @ £750,000			
Allowance for containment for communications systems and for future operator systems 22,500m² @ £7			

	£	£/m² GIFA	%
Special installations	**337,500**	**15.00**	**0.71%**
BMS controls 22,500m² @ £15			
Builder's work in connection	**390,000**	**17.33**	**0.82%**
Forming holes, chases, etc.; allow 3% @ £390,000			
Preliminaries and contingencies	**8,339,100**	**370.63**	**17.56%**
Contractor's overheads, site establishment and site supervision; allow 15% @ £5,886,900			
Testing and commissioning of building services installations, item @ £200,000			
Design reserve; allow 5% @ £2,252,200			
Total construction cost - shell costs only	**47,500,000**	**2111.09**	**100.00%**
OPERATOR'S FIT-OUT AND DIRECT CONTRACTS			
Furniture and fittings			
Office furniture, fittings and equipment, item @ £75,000			
Dressing room fittings and equipment, item @ £15,000			
Medical room, post room and box office fittings, item @ £10,000			
Allowance for miscellaneous fittings and equipment, item @ £100,000			
Electronic systems			
EPOS systems, item @ £100,000			
Ticketing systems and barriers, item @ £50,000			
Electronic information boards, item @ £50,000			
Telephone system, item @ £50,000			
IT installation and servers (main infrastructure in shell works), item @ £100,000			
FM and building management			
Waste management and compactor, item @ £15,000			
Workshop equipment, item @ £15,000			
Ride on cleaner, sweepers, scrubbers and cleaning equipment, item @ £50,000			
Forklift and access equipment, item @ £40,000			

	£	£/m² GIFA	%
Show systems and equiment			
Demountable stage with mixing platform, item @ £200,000			
Radio equipment, item @ £20,000			
Auditorium drapes and tracks, item @ £60,000			
Rigging latchlines, item @ £70,000			
Event cabling, item @ £20,000			
Event lighting, item @ £20,000			
Loose seating, item @ £90,000			
Concession and hospitality fit-out			
Loose catering and kitchen equipment, item @ £60,000			
Concession fitting out and equipment, item @ £100,000			
Merchandise stand fitting out and equipment, item @ £30,000			
Club lounge fixtures and equipment, item @ £60,000			
Restaurant fixtures and equipment, item @ £50,000			
Suite furnishings and equipment, item @ £400,000			
Concourse lounge fixtures and equipment, item @ £25,000			
Safes, item @ £25,000			
Operator's scope and interface contingency @ 15%			
Total operator's fitout and direct contracts	**1,900,000**	**84.44**	**n/a**
Total cost (excluding external works)	**49,400,000**	**2,195.53**	**n/a**

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