# Pergola System Specification

Uprights to be 11no. Jackured Jacksons 100x100mm treated posts, fixed to the floor with 20mm diameter mild steel rods inserted centrally into the bottom of each post to a drilled depth of 200mm and 22mm diameter and set in place with epoxy resin. The rods are to penetrate the ground to at least 300mm, ideally laid in place when other surfacing is set in efficiently. At least one of the pergola uprights and the majority of the baustrade upright need to be fixed into the edging of the circle and corner seating areas necessitating careful organisation of rendering and wall building tasks. A 25mm gap is to be left at floor level to avoid moisture ingress. Where posts require setting into the bank, a concrete post hole is to be dug 100 x 10x 450 for the mild steel rod. Finished height from floor to underside of the pergola is to be 2m. The cantilevered layout is strengthened by strong and full surface join contact half lap joints. Each of the 4 cantilevered joins to have 4No. galvanised steel M12 coach bolts 120mm long with washers countersunk on the underside, bolted up into the wood, ground off and wood fillered to hide the fixing and strengthen the join. All non-cantilevered joins to have at least 2 galvanised coach screws and where possible joins to be fully slotted for extra strengthening. All cut timber ends to have preserver applied upon cutting

### Ballustrading

Uprights to be 6no. Jackured Jacksons 75x75mm treated posts, fixed to the floor with 20mm diameter mild steel rods inserted centrally into the bottom of each post to a drilled depth of 200mm and 22mm diameter and set in place with epoxy resin. The rods are to penetrate the ground to at least 300mm, ideally laid in place when other surfacing is set in efficiently. A 25mm gap is to be left at floor level of each post to avoid moisture ingress. The finished height of the handrail is to be 900mm

2 identical 5mm galvanised steel rings are to be fabricated once the steel rods are in place for each side with a 75mm gap to accomodate the insertion and fixing of the main uprights. The fabricated sections are designed to recieve the intermediate 38mm balusters (and thinner 25mm sections if desired) and take the top hand rail machined out of timber to match the other wood work and neatly finshing at the pergola uprights and fixed by simple L brackets. The profile of the hand rail is to be a standard simple rectangle 100mm x 50mm with gently chamfered top edges.

The ballustrading at the kitchen door steps is attached to the existing masonry structure by way of expanding bolts and a handrail top to match the other sections.

# **Exact Upright Positions**

SUPPORTING POST FOR

CANTILEVERED PERGOLA

The exact positions of the uprights can be found on the plan MSW GD HL1

### Arbour Seat

ARBOUR SEAT

The arbour seat is to be made out of wood to match all the other timber works, employing 2No. 300 x 150mm x 2m sections of new 'railway sleeper' type timber, simply fixed to 6no. 50x50mm legs as per the perspective view above, set back 50mm at the wall and the edge of the seat and joined in a 45degree mitre joint. A 200mm x 200mm triangle section fixed to the junction aids sitting down. The finished height of the seat is to 500mm

Plan Ref: XXX GD HL2 Drawn by: I M Guyver Plan date: 18th June 2015 Client & address:XXXXXXXXX Camborne, CornwallXXXXXXXXX



# gardenlounge enhanced living space