

PGR INNOVATIONS LIMITED

Project

Main Contractor -

Quality Plan

Installation of Raised Access Floors

PGR Innovations Limited

46 Manor Road

Preston, Hull

HU128SQ

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Company Details

Company Name : PGR Innovations Limited

Company Reg. No : 2976321

Reg. Office : 46 Manor Road
Preston
Hull
HU128SQ

Quality Manager : Patrick Swift

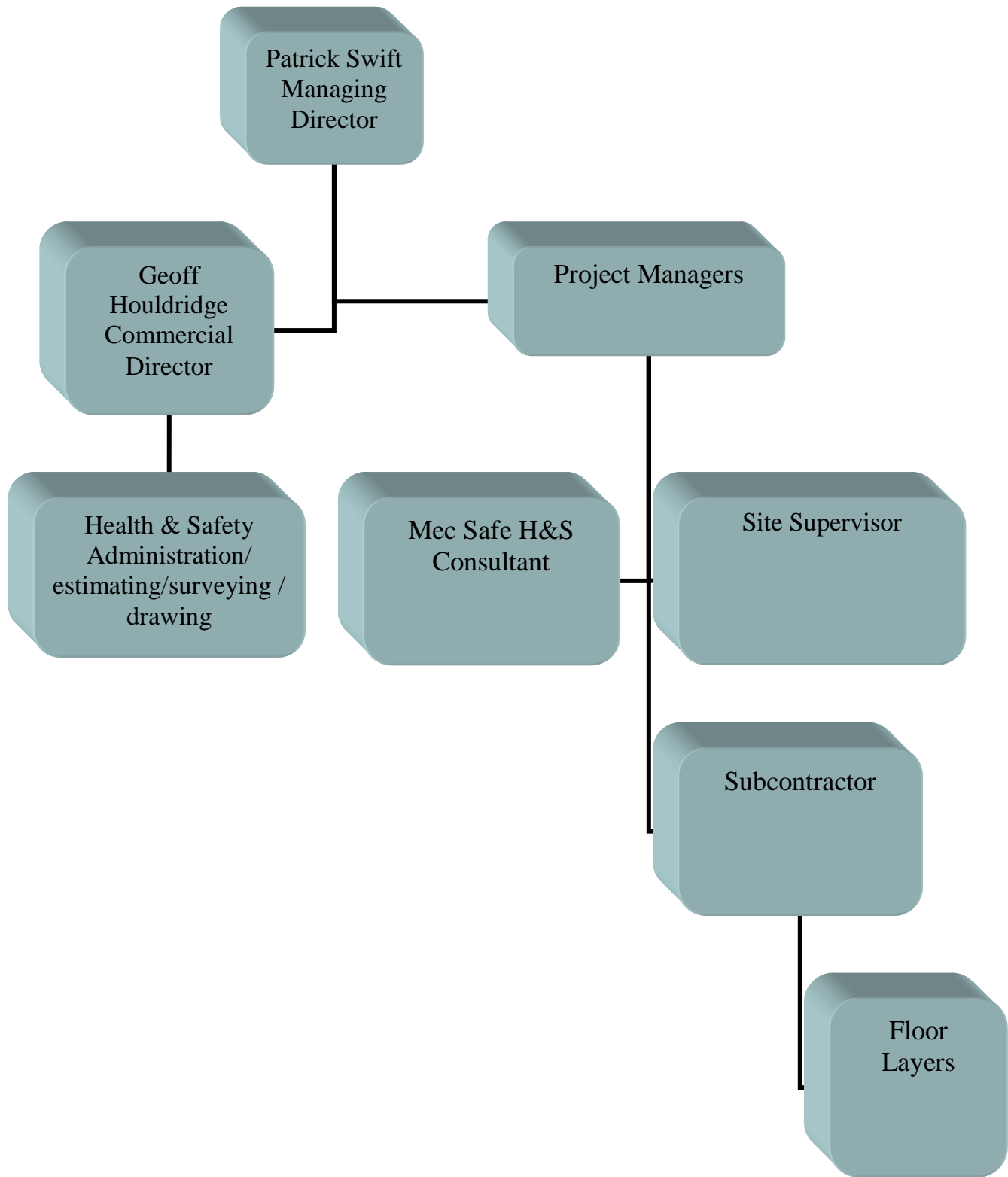
Quality Director : Patrick Swift

Mobile Tel No : 0777 3811514

Fax No : Not applicable

Email : pat.swift@pgrinnovations.co.uk

1.0 Organisation



1.3 Auditing Systems

Please refer to Appendix I for our Quality Policy Statement.

On Site – monthly audits will be undertaken to ensure quality control on site is maintained and documented by AFS management.

2.0 Materials and Pre-Fabricated Items/ On and Off Site

2.1 Prefabricated

Our panels and pedestals undergo rigorous quality checks by our manufacturers, who are ISO/British Standard registered to ensure they meet specifications required.

Our major manufacturers are: -

JVP s.r.l – Panel Manufacturer

Teamform s.r.l – Pedestal Manufacturer

Please find enclosed (Appendix II) above manufacturers quality assurance and ISO Certificates.

All panels delivered to site are marked up showing manufacturers name, brand name and storage conditions. There is also a date stamp on the packaging so the batch can be related back to ISO Quality procedure so it can be traced in the unlikely event of a problem.

All pedestals are boxed and palletised showing size and quantity and pedestal head type.

All timber products are FSC COC Certified – refer to FSC Folder for Certification details

2.2 Description Of Materials To Be Used On Site

Panel manufacturer and reference -JVP 4x4) 600x600x32mm medium grade panel.

Floor Pedestal manufacturer and reference - nominal void 560mm ground – 1200mm first floor.

1 Part Adhesive

Compressible closed cell foam.

Class) adhesive foil

Steel Bridging to suit.

Hardwood sports floor system Manufacturer -

Acoustic Floor system Manufacturer -

Materials are stored in a closed warehouse.

3.0 On Site Quality Control Document

3.1 Drawing Production

- Prior to commencement of works on site, full working drawings will be produced and issued in either paper copy format or uploaded to on-line information management system e.g. BIW.
- Once these have received an A status from the design team, they will be distributed to the Project Manager, site team and the floor laying teams.
- These drawings will provide all necessary information for the installation of the raised floor. Including all necessary sections through the floor highlighting details and junction likely to be encountered. These will be particularly relevant at the thresholds with surrounding areas and at the perimeter of the floor.

3.2 Slab Surveys

- Once the building is suitably advanced, surveys of the concrete slabs will commence.
- Either the AFS site team or an outside site engineering company will undertake the surveys.
- The information produced in these surveys will be used to determine the pedestal sizes required to each area of the raised floor.
- T42 Pedestal Tests will be carried out on one floor once the floor laying commences.

3.3 Method Statement

- The method statements for the job will be issued and revised as necessary until the relevant status is achieved. This will then be distributed to the Project Manager and will form the basis of the raised floor installation.
- The information contained in the method statement is relayed to site operatives and management by weekly toolbox talks.

3.4 Site Commencement

- In line with the issued construction programme, once on site PGR will ensure that the relevant area is clear of other trades materials and begin preparing for PVA sealing the structural slabs.
- Should areas of the project require specialised floor coatings e.g. RIW sealant applied these will be identified on the drawing issue.
- Sealants/coatings will be installed in line with the issued construction programme. The site supervisor will ensure that the relevant area is clear of other trades and materials prior to the sealing of the sub floor.
- The floor is cleared of debris and is cleaned in accordance with the specification requirements.
- Sealants/coatings are mixed and applied in accordance with manufacturer's instructions.
- The coats of differing coloured sealer and/or DPM coatings are left to dry before the next operation commences. The PGR site supervisor will liaise with the relevant floor manager to make a visual inspection of the sealing if required.

3.5 Material Distribution

- The materials for the project are delivered to site in 1 vehicles, to suit the logistics plan of the main contractor. Materials are either unloaded from the wagon by an all terrain telehandler or via a tail-lift mechanism with Pallet trucks. Products are deposited into main contractor hoists for vertical hoisting or by tele-handler to a floor scaffold gantry. From here PGR operatives will move material horizontally to the designated storage area.

3.6 Visual Inspection

- On arrival of the materials, visual inspections will be made of random stacks of panels and pedestals by the Quality

Manager to ensure the surface finish and uniformity of the materials.

3.7 Setting Out

- Setting out of the raised floor is critical to maintaining the grid and level of the floor.
- Using the approved drawings the setting out point will be established from base build columns. A dimension will then be taken from this line to match the centre or edge of panel on the raised floor grid.
- The height of the raised floor will be determined from the value of the datum (established by others). Care will be taken to ensure that this value is correct and that it is checked by both the floor laying teams and the PGR Project Manager in at least two locations in each area prior to setting out.
- Where there is large amounts of services in the floor voids extra care must be taken to ensure the floor stays on grid and misses the services and modules installed.
- Extra care must be taken to ensure the raised floor grid is to be set out to controlled break points/movement joints to minimise any creep of the grid between the floor panels.

3.8 Installation Monitoring

- During the installation, the PGR Quality Manager will check the installation of the floor as works progress to ensure the level to the datum is maintained within the tolerances set out in the PSA document, forming the specification for the raised floor.
- Care will be taken to ensure the perimeter detail of the floor is correct and any cantilevering or bridging is complete to approved details. The Quality Manager will ensure that cut panels are taped with a class 'O' adhesive material, and that a neoprene strip is affixed to the perimeter cut before being fitted.

3.9 Initial Handover

- The Quality Manager will check the installation as detailed above ensuring pedestals and stringers are correctly

installed and bridging fitted in the correct position. They will also snag the floor for any minor items prior to handover.

- The floors will then be offered up for inspection to the relevant Main Contractor package manager. The PGR quality Checklist handover document (copy supplied in Appendix), which is signed by the Project Manager to say that it has been checked.
- Any areas that were unable to be installed at the time of the original installation are marked on a drawing and attached to the handover documents.
- The Main Contractor manager will sign and return the handover sheets and drawing with any comments.
- The quality manager then takes the information off the attached drawing and any comments made and enter them on to the PGR Return Visit Action Sheet.
- Here each of the areas requiring return visits is noted. These areas are then completed as soon as they become available.
- Copies of the signed completed Return Visit Action Sheets along with the signed PGR handover for each of the floors will be kept in an PGR Quality File.
- A Trade Contractor Handover Sheet is generated on initial handover of the floor. This signs the floor over to the any following trade contractor, providing a written record of the date and the name of the contractor. A copy of the handover sheet is supplied in the Appendix.

3.10 Non Compliance

- Any items of work not conforming to the quality standards will be entered on to the non-compliance work sheet see Appendix IV and tracked until completion is signed off.

3.11 Workmanship/ Tolerances

- Workmanship and quality of the raised floor will be governed by the tolerances set out in the MOB and the K41 specification.

3.12 Control of Sub-Contractors

- All sub-contractors works will be inspected by PGR quality manager on completion of an area prior to offering up for handover and sign off.

3.13 Installation Standards and Recommendations

- Tolerance will conform to those set out in the PSA or BSEN12825 specification for raised access flooring.

3.14 Protection of materials and prefabricated items

- All materials are palletised and banded for secure transportation by container/lorry. Materials are stored in closed warehouse and stacked according to manufactures instructions. Delivery to site will be in line with programme via curtain side vehicle (unloaded by fork lift) and distributed to workface using mini fork lift truck and pallet truck.

3.15 Sample Testing

- T42 pedestal test will be conducted once pedestals have cured and the mechanical fixings(if required) have been fitted as agreed with the package manager of the Main Contractor.

3.16 CAR'S

- Will be logged in the quality file. The non-compliance worksheet see appendix IV will be used to track the defective item until completion and sign off.

3.17 Snagging

- PGR have a system of 'in house' snagging which will be conducted by the PGR Quality Manager prior to final handover of the floors.
- The snagging items carried out by our operatives and then checked and signed off with dates by the Quality Manager. Typically snagging items including; de-rocking and de-lipping of the finished floor system.
- Any additional items picked up by the Main Contractor during sign off will be noted, completed then check and signed by PGR quality manager and MC staff.

3.18 Final Handover

- On completion of the PGR and MC snagging items, a Final Handover inspection sheet is submitted in appendix V.
- After inspection by MC the form is signed and returned as a written record of completion of that area of floor.

3.19 O & M Manuals

- As the buildings are completed, record drawings and information will be produced and collated to form the O&M manuals. These will be issued in the formats identified in the tender documents.

4.0 Tests Carried Out On Site

T42 Pedestal tests will be carried out after floor is complete and adhesive has had time to cure fully.

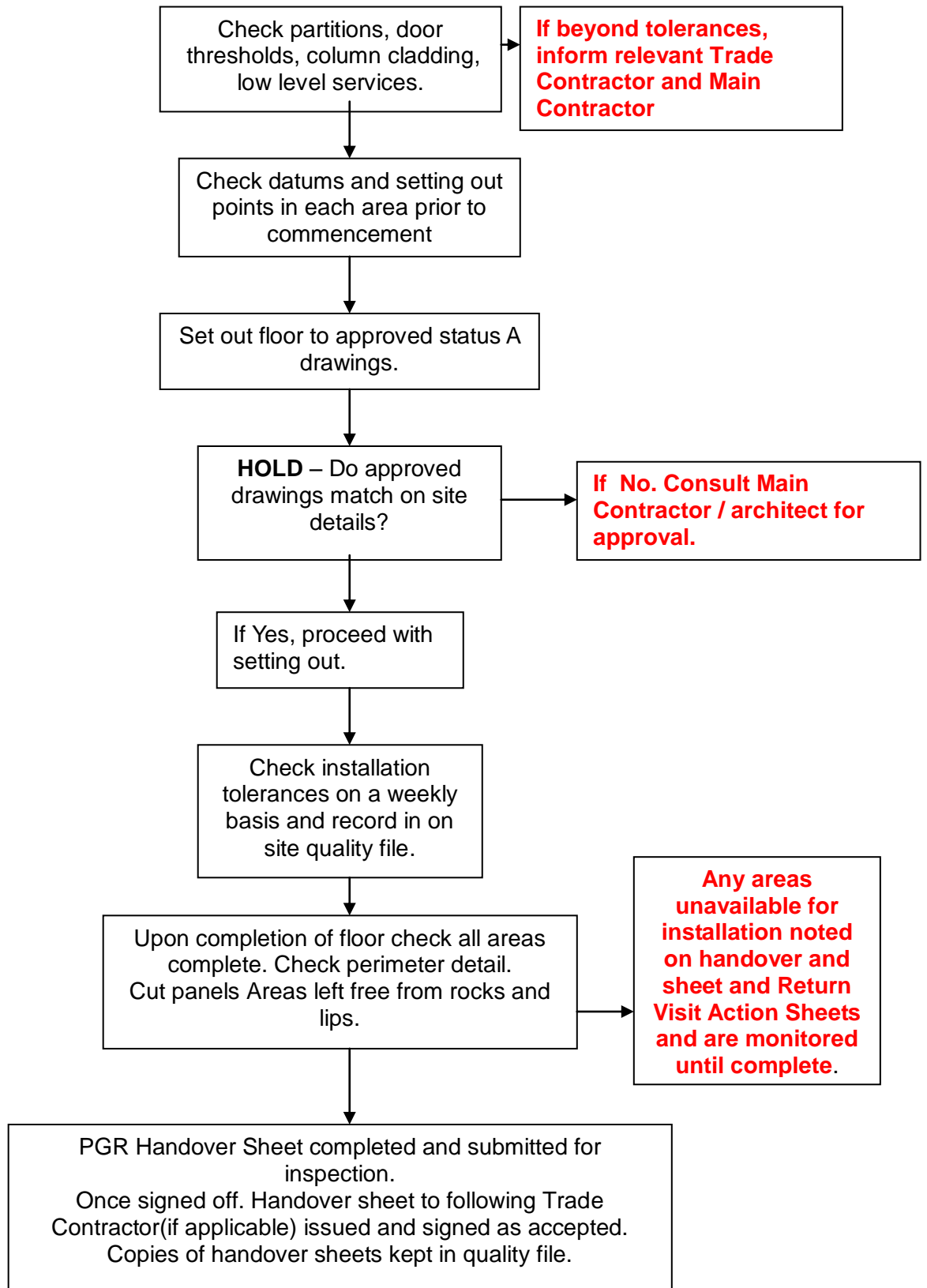
Please refer to Appendix VI T42.00 Pedestal Structure and Fixing Test.

5.0 Site specific Quality Flow Chart

Please find enclosed the above flow chart that shows systems used to ensure inspections of works are carried out at all stages.

The chart will be updated as required.

QUALITY FLOW CHART



PGR INNOVATIONS LIMITED

6.0 Off Site Monitoring/ Inspection & Testing

Our materials are constantly under scrutiny by the Quality Control of ISO 9001.

PGR Ltd management make regular visits to our suppliers in Italy to monitor production.

Appendix I

Quality Policy Statement

Appendix II

Manufacturers Quality Procedure Information

Appendix III

PGR Handover Sheet



Project -

Raised Floor

Progressive Handover Sheet

Area.

Description - BARE FLOOR INSTALLATION COMPLETE

Drawing Attached? NO / YES

| Description | Complete | Checked By PGR | |
|--------------------------------|----------|----------------|--|
| Floor Sealed 1 Coat | | | |
| Spotting Out Complete | | | |
| Slave Floor Installed | | | |
| Bridging Complete | | | |
| Perimeter Cutting Complete | | | |
| Stringers and Screws Installed | | | |
| Mechanical Fixing Complete | | | |
| Vinyl Panels Installed | | | |
| All Cuts Taped/Neoprene | | | |
| Under Floor Clean Complete | | | |
| | | | |

Comments -
.....
.....

Signed as complete
For PGR Innovations Ltd

Print

Signature

Signed as complete
For.....(Main Contractor)

Print

Signature

Appendix IV

Non- Compliance Work Sheet



Non Compliance Work Sheet

Building -

Level -

Location -

Description Of Element
To Be Rectified -

.....

Reason For Non Compliance-

.....

Anticipated Completion Date -

Element Complete Y or N ?

.....

Signed as complete
For PGR Innovations Ltd

Print

Signature

Signed as complete
For(Main Contractor)

Print

Signature

Appendix V

Final Handover Sheet

FINAL HANDOVER SHEET

FLOOR HANDED TO:

DATE:

BUILDING/LEVEL:

DRAWING ATTACHED?

DATE INSPECTED:

INSPECTION BY:

COMMENTS:

**Final Handover Of Raised Floor Accepted
On Behalf Of PGR Innovations Limited.**

Print Name:

Signature:

**Final Handover Of Raised Floor Accepted
For(Main Contractor)**

Print Name:

Signature:

Appendix VI

T42 Pedestal Test

PGR INNOVATIONS LIMITED

**T42 Pedestal Test Report – Test Carried Out In Accordance with MOB
PF2 PS/SPU Specifications**

Project: -

Location: -

Date:-

I/we confirm that we have witnessed a T42 pedestal test carried out at the above project.

| Date | Name (Print) | Signature | Company | Pass/Fail/Other Comments |
|-------------|-------------------------|------------------|----------------|-------------------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |