

Engineering Services Planning

On-Floor Plant Room Progress Schedule

The on-floor plant room progress schedule provides a graphical portrayal of the installation performance for senior management / director's review. This schedule provides an appraisal of the overall works at a given date without the need for a written report. It is enhanced by the notes and call-out text boxes, which provide key information relative to the progress.

These particular examples indicate the progressive performance of two on-floor plant rooms between the basement and level 7. The first schedule indicates the planned performance at "Week Number" 7, whilst the second indicates the actual performance at week 11.

This schedule provides an ongoing progress report of the M&E services and builder's work with regard to on-floor plant room Installations and contains the following five activities: -

1. Deliver & Position AHU (Complete with plenum)
2. Plant Room Services Installation
3. Plant Room Builder's work
4. Plant Interfaces Complete
5. LV Supply Available to Plant Room

These five items represent the on-floor plant room installations and would be replicated for each floor level. The "Co-ordination Item" column indicates where each item should fit into the overall co-ordinated installation of the Plant room.

Item 1:

Refers to the delivery and positioning of the main Air Handling Unit and plenum, which would be dependant on the availability of the room.

Item 2:

Contains the co-ordinated sequence of M&E services activities within the on-floor plant room, each activity is individually percentage weighted towards the overall total for item 2.

Item 3:

Item 3 is as item 2 but in respect of the on-floor plant room builder's work.

Item 4:

This indicates the completion of the on-floor plant room plant interfaces, which would enable the pre-commissioning to commence.

Item 5:

This indicates the availability of the LV supplies to the on-floor plant room for commissioning.

When a "Week Number" is inserted (into the grey cell) the programmed "Week Ending" date automatically changes to represent that programme week ending date, and the cells associated with the planned performance change to red.

Actual progress values are then entered for each activity of each on-floor plant room against the respective floor levels.

The progress values for this schedule must relate to their individual weighting. For example, the "Cast in Gully" activity has an individual weighting of "2", therefore if this was complete the number "2" would be entered into the appropriate cell. If it was 50% complete the number "1" would be entered into the appropriate cell.

When a cell value matches its individual weighting it will change to green to signify its "Completion". Any values entered up to this point will change the cell to yellow to signify its "Ongoing" progress.

The "Group Services Percentage Complete" for each individual on-floor plant room will automatically calculate itself.

Items 1 - 5 could be included in the main programme. (Items 2 & 3 would be summarised)

Week Number **7** Week Ending **15-Apr-05** Planned % Planned % Ongoing % Ongoing % Complete Complete

BUILDING REFERENCE

Co-ordinated installation sequence reference No.s

Programme week number and date

CORE & LEVEL REFERENCE

Basement to Level 7

Co-ordination Item No.

Individual Weighting %

| NE | NW | NE | NW | NE | NW | NE | NW | NE | NW | NE | NW | NE | NW | NE | NW | NE | NW | NE | NW | NE | NW |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| B | B | G | G | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | | | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|--|----|-----|-----|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Deliver & Position AHU (Comp with Plenum) | 3 | 100 | | | | | | | | | | | | | | | | | | | |
| 2 | PLANT ROOM SERVICES INSTALLATION | | NE | NW | | | | | | | | | | | | | | | | | | |
| | Cast in Gully | 1 | 2 | 2 | | | | | | | | | | | | | | | | | | |
| | H/L Sprinkler Pipework | 4 | 8 | 6 | | | | | | | | | | | | | | | | | | |
| | H/L Gully Drainage Pipework | 4 | 8 | 6 | | | | | | | | | | | | | | | | | | |
| | West Plant Room Pipework and Connections | 5 | 13 | | | | | | | | | | | | | | | | | | | |
| | East Plant Room Ductwork | 5 | 19 | | | | | | | | | | | | | | | | | | | |
| | West Plant Room Ductwork | 6 | 16 | | | | | | | | | | | | | | | | | | | |
| | East Plant Room Pipework and Connections | 7 | 16 | | | | | | | | | | | | | | | | | | | |
| | West Tenant's Public Health Pipe work | 9 | 10 | | | | | | | | | | | | | | | | | | | |
| | Electrical 1st fix | 9 | 15 | 15 | | | | | | | | | | | | | | | | | | |
| | Fit Gauges & Valves | 10 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| | Fire Alarm / PA Installation | 10 | 7 | 7 | | | | | | | | | | | | | | | | | | |
| | BMS Installation | 10 | 5 | 5 | | | | | | | | | | | | | | | | | | |
| | Install & Terminate LV Cable | 11 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| | Pipework Insulation | 11 | 5 | 5 | | | | | | | | | | | | | | | | | | |
| | Smoke Extract dampers interface connections | 12 | 2 | 2 | | | | | | | | | | | | | | | | | | |
| | Electrical Final Fix | 12 | 4 | 4 | | | | | | | | | | | | | | | | | | |
| | BMS Plant Connections | 12 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| | Group Services Percentage Complete | | 100 | 100 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | PLANT ROOM BUILDERSWORK | | NE | NW | | | | | | | | | | | | | | | | | | |
| | Bund Wall | 1 | 5 | 5 | | | | | | | | | | | | | | | | | | |
| | Paint Concrete Walls | 2 | 5 | 5 | | | | | | | | | | | | | | | | | | |
| | Paint / Seal floor | 2 | 5 | 5 | | | | | | | | | | | | | | | | | | |
| | Dry lining / tape & jointing / temporary door | 8 | 60 | 60 | | | | | | | | | | | | | | | | | | |
| | 1st Visit Decoration | 8 | 5 | 5 | | | | | | | | | | | | | | | | | | |
| | Fireseal around riser services | 13 | 10 | 10 | | | | | | | | | | | | | | | | | | |
| | Complete Decoration | 14 | 10 | 10 | | | | | | | | | | | | | | | | | | |
| | Group Builderswork Percentage Complete | | 100 | 100 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | PLANT INTERFACES COMPLETE | 15 | 100 | | | | | | | | | | | | | | | | | | | |
| 5 | LV SUPPLY AVAILABLE TO PLANT ROOM | 16 | 100 | | | | | | | | | | | | | | | | | | | |

Individual weighting percentages of the overall plant room services installation

Individual services installation progress performance of each plant room

Individual weighting percentages of the overall plant room builder's work

Individual builder's work progress performance of each plant room

Notes
 1 PLANNED PROGRESS AT 15TH APRIL 2005

Week Number **11** Week Ending **13-May-05** Planned % ■ Ongoing % ■ Complete ■

| | BUILDING REFERENCE | | | CORE & LEVEL REFERENCE | | | | | | | | | | | | | | | | | |
|---|--|------------------------|------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Basement to Level 7 | Co-ordination Item No. | Individual Weighting % | NE B | NW B | NE G | NW G | NE 1 | NW 1 | NE 2 | NW 2 | NE 3 | NW 3 | NE 4 | NW 4 | NE 5 | NW 5 | NE 6 | NW 6 | NE 7 | NW 7 |
| 1 | Deliver & Position AHU (Comp with Plenum) | 3 | 100 | | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 50 | 50 | 50 | | |
| 2 | PLANT ROOM SERVICES INSTALLATION | | NE NW | | | | | | | | | | | | | | | | | | |
| | Cast in Gully | 1 | 2 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | H/L Sprinkler Pipework | 4 | 8 6 | | 6 | 8 | 6 | 8 | 6 | 8 | 6 | 4 | 6 | 4 | 3 | 2 | 3 | | 3 | | 2 |
| | H/L Gully Drainage Pipework | 4 | 8 6 | | 8 | 8 | 6 | 8 | 6 | 8 | 6 | 4 | 6 | 4 | 4 | 4 | 6 | | | | |
| | West Plant Room Pipework and Connections | 5 | 13 | | 13 | | 13 | | 13 | | 13 | | 7 | | 7 | | | | | | |
| | East Plant Room Ductwork | 5 | 19 | | | 19 | | 19 | | 19 | | 19 | | 12 | | | | | | | |
| | West Plant Room Ductwork | 6 | 16 | | 16 | | 16 | | 8 | | 8 | | 8 | | 8 | | | | | | |
| | East Plant Room Pipework and Connections | 7 | 16 | | | 8 | | 8 | | 8 | | 8 | | 8 | | | | | | | |
| | West Tenant's Public Health Pipe work | 9 | 10 | | 10 | | 10 | | 5 | | 5 | | | | | | | | | | |
| | Electrical 1st fix | 9 | 15 15 | | 10 | 15 | 15 | 15 | 15 | 10 | 5 | 5 | 5 | 5 | | | | | | | |
| | Fit Gauges & Valves | 10 | 3 3 | | | | | | | | | | | | | | | | | | |
| | Fire Alarm / PA Installation | 10 | 7 7 | | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | |
| | BMS Installation | 10 | 5 5 | | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | |
| | Install & Terminate LV Cable | 11 | 3 3 | | 2 | 2 | 2 | 2 | | | | | | | | | | | | | |
| | Pipework Insulation | 11 | 5 5 | | | | | | | | | | | | | | | | | | |
| | Smoke Extract dampers interface connections | 12 | 2 2 | | | | | | | | | | | | | | | | | | |
| | Electrical Final Fix | 12 | 4 4 | | | | | | | | | | | | | | | | | | |
| | BMS Plant Connections | 12 | 3 3 | | | | | | | | | | | | | | | | | | |
| | Group Services Percentage Complete | | 100 100 | | 73 | 68 | 76 | 68 | 61 | 55 | 45 | 42 | 34 | 35 | 24 | 8 | 11 | 2 | 5 | 2 | 4 |
| 3 | PLANT ROOM BUILDERSWORK | | NE NW | | | | | | | | | | | | | | | | | | |
| | Bund Wall | 1 | 5 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | Paint Concrete Walls | 2 | 5 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | Paint / Seal floor | 2 | 5 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | Dry lining / tape & jointing / temporary door | 8 | 60 60 | | 40 | 60 | 60 | 60 | 60 | 40 | 40 | 10 | | | | | | | | | |
| | 1st Visit Decoration | 8 | 5 5 | | 5 | 5 | 5 | 3 | 3 | | | | | | | | | | | | |
| | Fireseal around riser services | 13 | 10 10 | | | | | | | | | | | | | | | | | | |
| | Complete Decoration | 14 | 10 10 | | | | | | | | | | | | | | | | | | |
| | Group Builderswork Percentage Complete | | 100 100 | | 60 | 80 | 80 | 78 | 78 | 55 | 55 | 25 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| 4 | PLANT INTERFACES COMPLETE | 15 | 100 | | | | | | | | | | | | | | | | | | |
| 5 | LV SUPPLY AVAILABLE TO PLANT ROOM | 16 | 100 | | | | | | | | | | | | | | | | | | |

Notes

1 AHU's delivered - but not positioned
 2 Awaiting delivery of valves & gauges
 3 Cables installed but not terminated
 4 Awaiting positioning of AHU's
 5 Area not fully watertight
 6 Awaiting completion of drylined walls