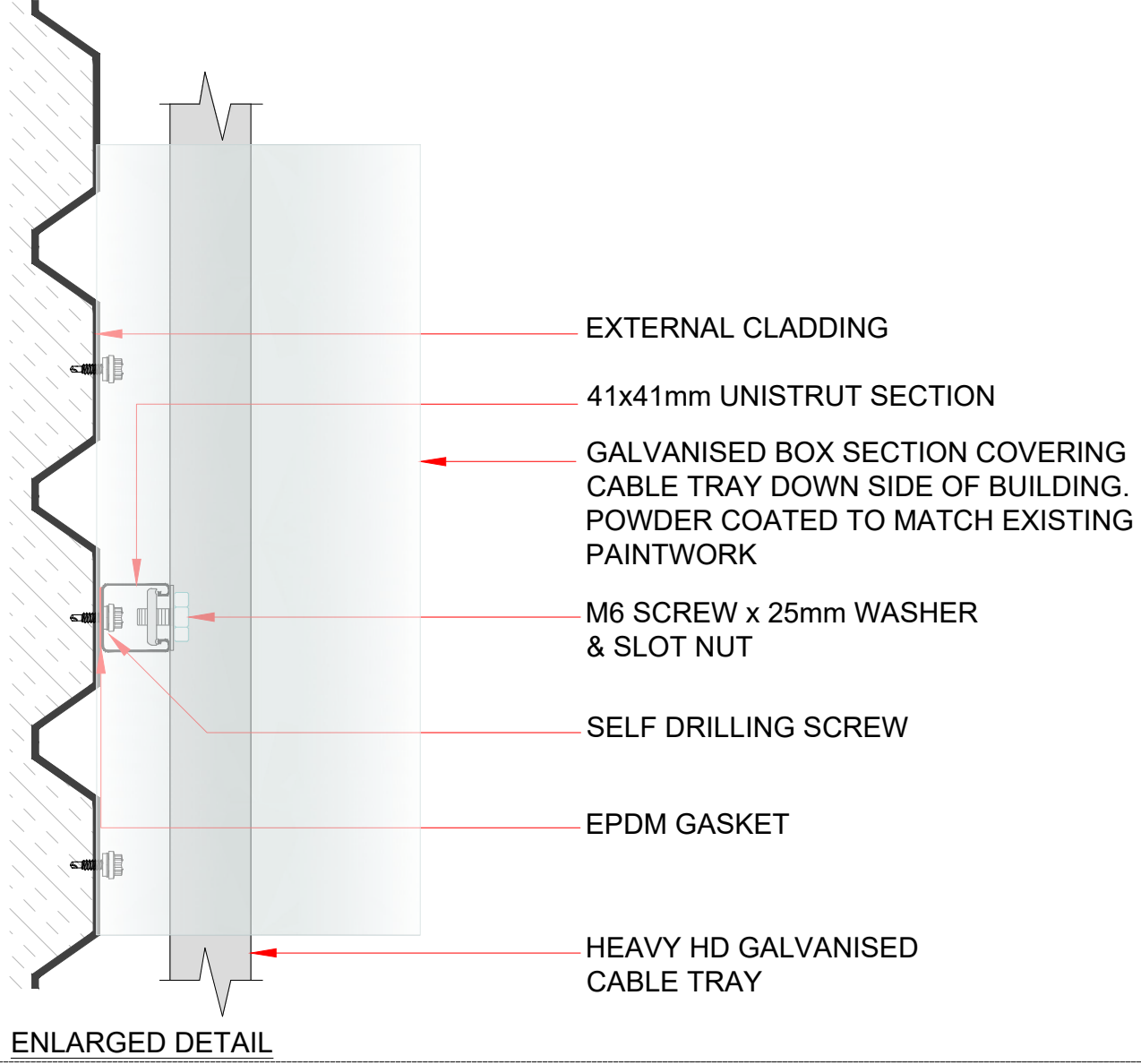
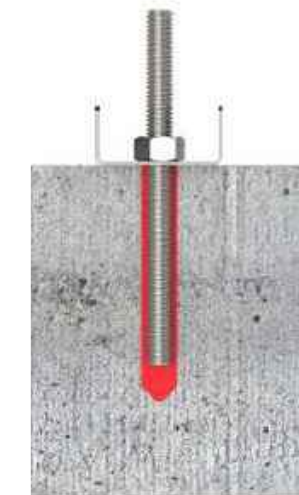


225mm WIDE CABLE TRAY RUNS UNDER DUCT TO INVERTERS

CABLE TRAY UNISTRUT SUPPORTS BOLTED TO CONCRETE AS EXISTING DUCT SUPPORT



CABLE TRAY ROUTE



RESIN ANCHOR



TRAPEZE SUPPORT

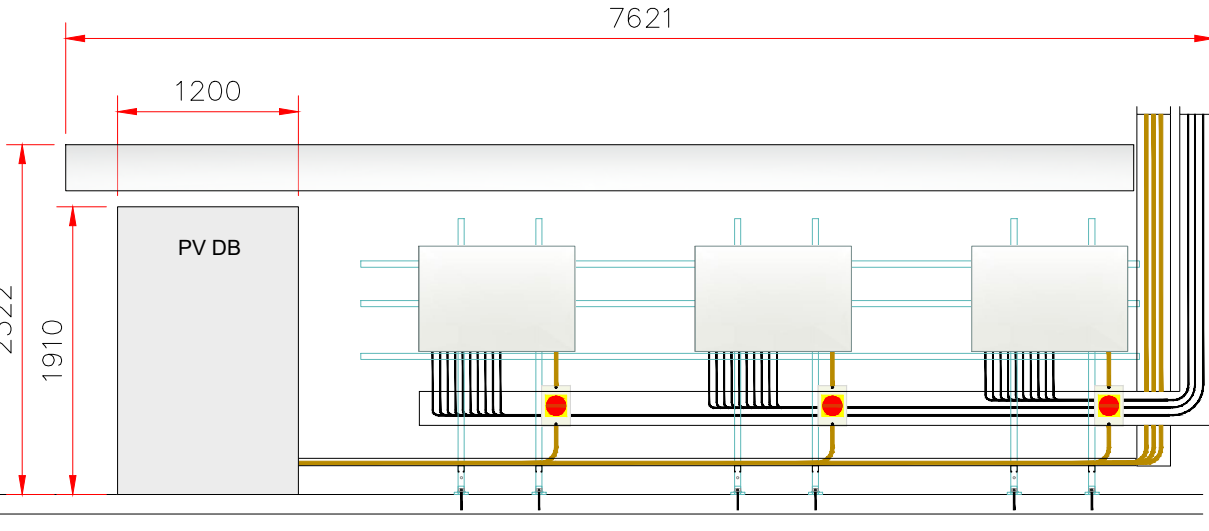


INVERTER STATION LOCATION

225mm WIDE CABLE TRAY DROPS DOWN IN THIS LOCATION AND RUNS UNDER EXISTING DUCTWORK AT H/L TO MAINTAIN CLEAR ACCESS TO DOOR. CABLE TRAY SUPPORTED OFF NEW UPRIGHT SECTIONS OF UNISTRUT SUPPORTED OFF THE FLOOR ON FLEX-FOOT SUPPORT SYSTEM

CABLE TRAY BOXED SECTION (SEE DETAIL & PLAN)

3 BUNDLES OF DC CABLES ON CABLE TRAY & 3 AC CABLES RUN UNDER DUCTWORK CABLE TRAY SUPPORTED WITH UNISTRUT TRAPEZE BRACKETS SUPPORTED OFF FLOOR WITH UNISTRUT 41x41mm UPRIGHT SECTIONS



ELEVATION

CANOPY ROOF COVER

PV DB

INVERTERS

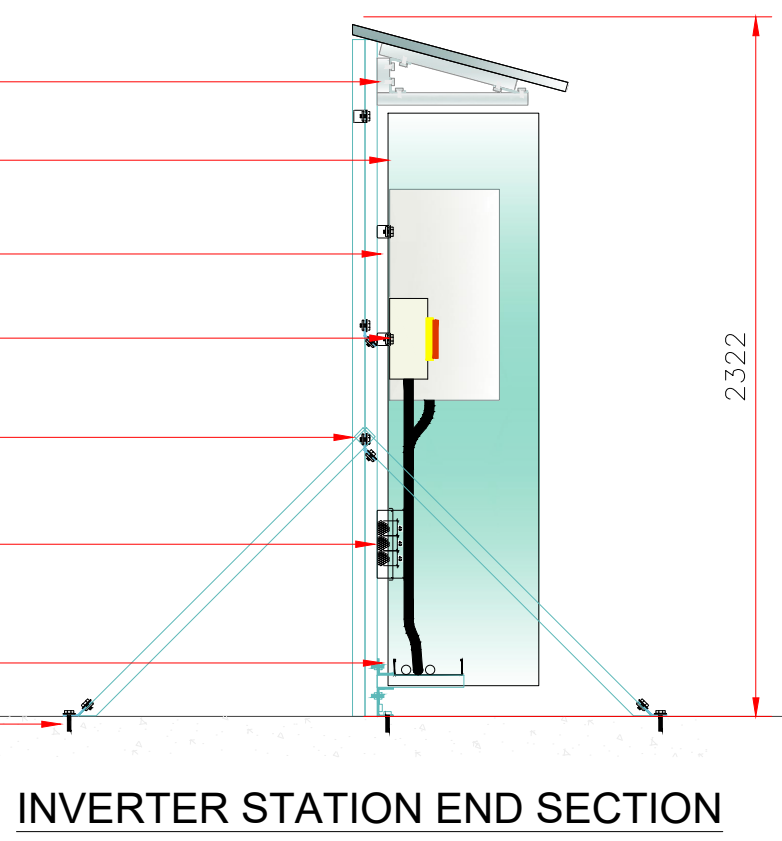
AC ISOLATORS

UNISTRUT SUPPORT FRAME

225mm DC CABLE TRAY

225mm AC CABLE TRAY

RESIN ANCHORS INTO CONCRETE SLAB ON ANGLED SUPPORTS AND CENTRAL SPINE



INVERTER STATION END SECTION

Air Handling Unit

DC CABLE TRAY DROPS DOWN SIDE OF BUILDING & TURNS TO RUN UNDER EXISTING DUCTWORK TO INVERTER STATION

AC CABLE TRAY RUN UNDER EXISTING DUCTWORK AND THROUGH EXTERNAL WALL INTO POC IN LV05

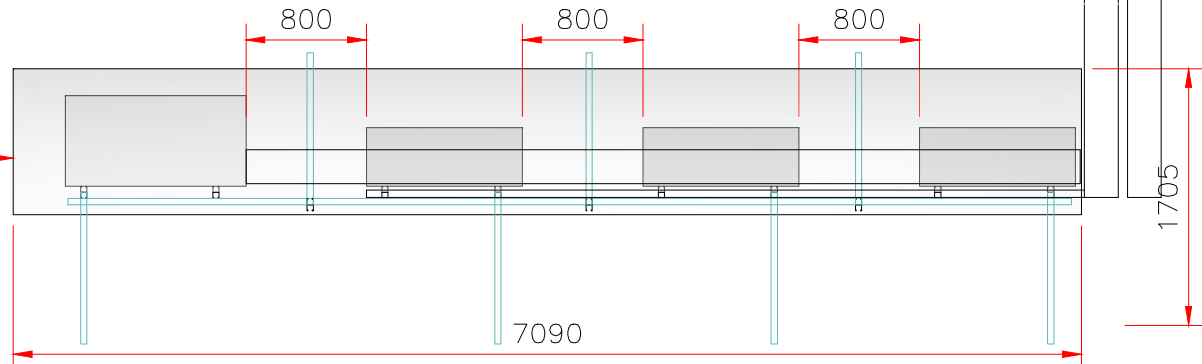
AC & DC CABLE TRAY ROUTE OVER WALKWAY

GRAVEL AREA

GRAVEL AREA

INVERTER STATION

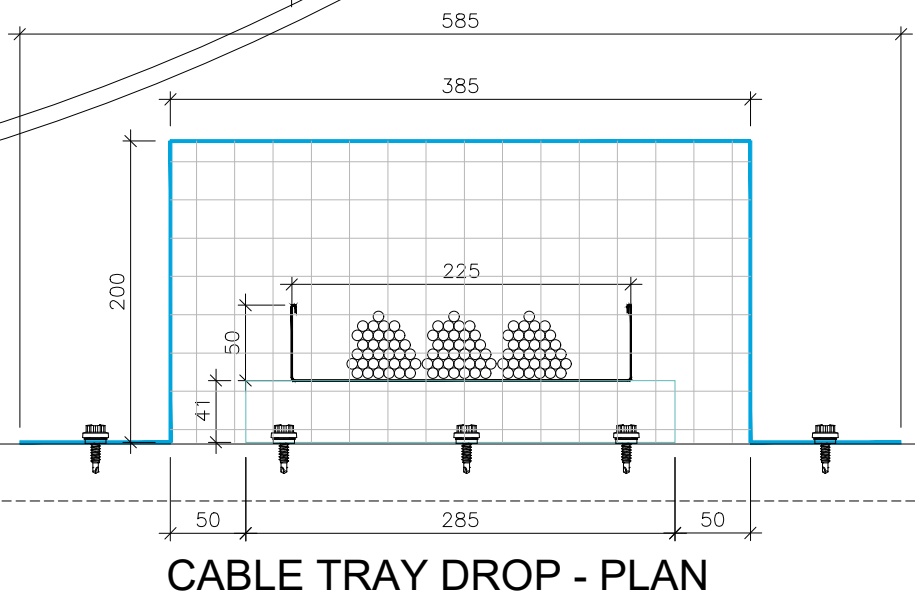
7 No. ANGLED SUPPORT SECTIONS WITH 45° ANGLE BRACKETS RESIN ANCHORED TO THE CONCRETE SLAB



GRAVEL AREA

GRAVEL AREA

Transformer



CABLE TRAY DROP - PLAN

This drawing is property of SAS ENERGY Ltd. No attempt should be made to copy or re-sell the drawing without prior written authorisation by the Managing Director.
This drawing is not to be scaled - written dimensions only to be used. Plan drawings indicative for reference only.

Notes:

Cable requirement/calculations based on SAS ENERGY document CBLDOC1 in accordance with the following:

1. The Electricity at Work Regulations
2. The Health & Safety at Work Act
3. BS 7671 Requirements for Electrical Installations
4. The IEE Wiring Regulations
5. BS EN 60904 Photovoltaic devices
6. BS EN 61173 Overvoltage protection for photovoltaic power generating systems
7. ENA ER G99 Recommendations for the connection of Generating Plant to Public Electricity Suppliers Distribution Systems
8. IEC 60364-7-712 Electrical installations in Buildings Part 7-712: Requirements for special installations or locations. Solar PV power supply systems.

THE CONSTRUCTION DESIGN AND DRAWING IS BASED ONLY ON THE PRE-CONSTRUCTION INFORMATION PROVIDED BY THE CLIENT. FAILURE BY THE CLIENT TO FURNISH INFORMATION THAT COULD BE AVAILABLE, MAY INCUR ADDITIONAL COSTS AT THE CLIENT'S EXPENSE, UPHELD BY CDM 2015 REG 5, GUIDANCE NOTE 43.

THE SIZE OF THE SOLAR PV CONNECTION POINT(S) HAVE BEEN DESIGNED BASED ON THE INFORMATION PROVIDED. SAS ENERGY LTD CANNOT BE HELD RESPONSIBLE FOR ANY ADVERSE ISSUES IF THE SUPPLIED INFORMATION IS INCORRECT.

ROOF ACCESS & LIFTING STRATEGY TO BE CONFIRMED IN THE APPROVED CPP AND RAMS.

THE INSTALLATION OF A ROOF MOUNTED PV SYSTEM WILL INCREASE FUTURE REQUIREMENTS FOR WORK ON THE ROOF AREA, WHICH MAY NEED FURTHER INVESTIGATION AND BE DETAILED IN THE H&S FILE SUPPLEMENTARY DOCUMENTATION.

DUE TO THE AGE AND CONDITION OF THE ROOF SHEETS, GUTTERS, AND MAKE-UP OF THE OVER CLAD ROOFING, THE CONTRACTOR CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE OR LEAKAGES OF ANY KIND, DUE TO THE INSTALLATION OF H&S CONTROLS, EDGE PROTECTION, FRAGILE SURFACE PROTECTION, SCAFFOLDING, WALKING AREAS, LOADING OR INSTALLATION. THE FINAL PV SYSTEM WILL NOT AFFECT THE INTEGRITY OF THE ROOF, BUT NO ROOF CONDITIONING PCI HAS BEEN SUPPLIED WITH REGARD TO THE PREVIOUS STATEMENT.

HANDRAILS, MAN SAFE AND SCAFFOLDING MAY BE REQUIRED FOR FUTURE MAINTENANCE OF THE PV SYSTEM, AS PART OF AN ONGOING CDM 2015 PROCESS.

ALL CONSTRUCTION DESIGNS AND DRAWINGS WILL BE DEEMED ACCEPTABLE TO BOTH THE CLIENT AND THE PD, UNDER CDM 2015, ON RECEIPT OF A WRITTEN CONTRACT, EMAILS, RELEVANT PURCHASE ORDER/S OR COMMENCEMENT OF WORK OF ANY KIND (INCLUDING ENABLING WORKS).

NOTE:
ALL AC AND DC CABLES ARE TO BE COLOUR CODED TO BS:7671 STANDARD WITH SUITABLE PRODUCT/SLEEVEING



REV	REVISION DETAIL	BY	APV	DATE



CLIENT

FERN ROOFTOP SOLAR (A) LIMITED

JOB

MAN1
MANCHESTER AIRPORT,
6 SUNBANK LANE.
M90 5AA

TITLE

T5 INVERTER ELEVATION
DETAILS

STATUS

90% DETAILED DESIGN

DRAWN/CHKD	DATE	SCALE
NT	8/4/2021	1:50 @ A1

DRAWING No.
MAN1_M63_DET_T5 INVERTER
ELEVATION DETAILS_C2