



SFS/NH/4083-F1

30th May 2014

Mr Richard Nurden
ASD Metals
Tunstall Road
Stoke-On-Trent
ST8 6JZ

Email and Post

Dear Mr Nurden,

Re: Roof, Roof Light and Side Cladding refurbishments to the above site.

GUARANTEES

Main Roof Refurbishments and Side Cladding to receive a 25 Year guarantee on materials from the Manufacturer. Plygene gutter liner to receive a 15 year guarantee on materials from the Manufacturer. STORM to provide a 10 year workmanship guarantee on sheeting refurbishments and gutter liners.

Revised Note:

We now include the additional items as requested and in summary also confirm the following;

- Area C (front cladding) will be taken down to brickwork level.
- All redundant flues, roof ducting and access steel walkway to be removed from roof levels, lowered to ground and removed from site are to be included in our costs provided below.
- A refurbishment and demolition survey will be included in our costs below if the main work is ordered.
- We suggest 3 air monitoring tests are conducted at the start, middle and end of refurbishment work to bays 4, 5 and 6 in particular.

- A construction phase plan is to be forwarded following placement of PO but was agreed at meeting at Bay 5 (barge end) and vertical cladding, Bay 6, Back to Bay 5, Bay 4 and Roof Lights and Cladding to be worked on during down days and dictated by (poor weather / high winds).
- Any additional structural steel work found to be required following a site survey from our structural engineer is now included to the rear of Lucky Bags and rear lean-to (Bay 5) cladding included in our total cost shown below.
- A basic SWMP (Site Waste Management Plan) is included in our quote.
- Structural Engineer includes all roofing and cladding steelwork calculations to Bays 1,2 & 3 inclusive of lean too areas following demolition work.

Report

Further to our recent site visit it was noted that a number of roofs on site require full refurbishment's including roof removal and replacement, side cladding and roof light replacement.

The roof areas on site consist of big six profiled chrysotile asbestos sheeting and incorporate a number of georgian wire roof lights.

To enable erection of some perimeter scaffolding it has been agreed that adjacent lean too buildings will be demolished prior to the start of any work on site.

Defects

Whilst no on roof access was gained to the highest level unit it can be assumed it is of the same or similar condition as lower level adjacent roof areas.

Asbestos Roof Sheets

The roof sheets are showing signs of deterioration with moss and lichen between profiles having acted like a sponge slowing rainwater flow to adjacent gutters allowing rainwater to hold on the roof sheets longer.

The underlying asbestos roof sheets have softened as a result of this and hairline cracks are apparent.

Fixings appear corroded and small apertures have also been worked into the perimeters of hook bolt fixing points as a result of thermal building movement.

Roof Lights

The roof lights incorporated within the roof space surveyed consist of a Glass Reinforced Plastic (GRP).

Due to typical ultra violet degradation over the years the roof lights have been attacked by the harmful rays of the sun which has resulted in embedded discoloration which cannot be simply cleaned.

Minimum natural light is therefore entering the working environment below and building running costs are currently increased as internal electrical lighting has to be left on throughout the day and heat retention is being lost through the deteriorated plastics.

The exterior face of the GRP roof lights may also be suffering from small apertures at side and end laps as a result of constant expansion and contraction combined with inclement weather warping the fragile plastic. The actual roof light also becomes brittle and susceptible to hairline cracks forming.

Gutters

The existing gutters typically come in three metre interlocking sections which are bolted together and sealed in butyl gutter mastic at the time of original installation.

Thermal movement occurs within the building which places stressors on the joints resulting not only in the mastic perishing, but the gutters joints eventually also open slightly resulting in small apertures and leaks at affected areas.

Recommendations

Item 1 – We have quoted to remove and replace the 3 number roofs on site identified as Area A in the attached drawing including 20% roof lights at Bays 4 & 5. As agreed no roof lights are to now be re-instated Bay 6 area.

Item 2 – We have quoted to overclad the existing cladding to the full perimeter of the high level building only identified as Area B and down to existing brickwork level.

Item 3 – We have quoted to over clad the remaining front customer cladding sections shown as Area C and down to existing brickwork level.

Item 4 – We have quoted a cost to install vertical cladding including rails and any required supporting steels to the 3 number barge ends at the rear of site and the side elevation that will be exposed when the lean too buildings are removed. These are identified as Area D. All cladding to ground level.

Item 5 – Finally we have shown a quote to remove all roof lights and replace with new at the 3 number roof areas shown on the drawing as Area E and 1 number side elevation to the rear.

Item 6 - We have quoted a cost to install vertical cladding including rails but no major steels to the 1 number rear end of Bay 3. These are identified as Area F and will be sheeted down to ground level.

Item 7 – We have quoted to install jointless plygene gutter liners at all valleys and eaves gutters with a flashing detail to seal. As discussed the 2 corroded gutters at the front and rear of Bays 4 & 5 will first be stripped and replaced.

Item 8 - Replacement of roof lights to front cladding and sheet repairs as identified at Bay 1.

Item 9 - Overlay sheet repairs to damaged asbestos and removal of loose liner panels to Bays 1, 2 and 3.

Item 10 - Installation of 3 number exterior fire doors and associated perimeter flashings. These to be steel doors with powder coated (colour to match cladding as closely as possible) including panic bar and anti-jemmy lip around framework.

Item 11 - Replacement of 4 asbestos downpipes to Rear of Bay 3 and re-installation of 2 number cast downpipes to rear of Bay 5 to move external of the building. Installation of additional downpipe to rear of Bay 5.

Item 12 - Removal of all redundant ventilations to Bays 1, 2 and 3 including 2 number large sections of ducting located adjacent to valley gutters and make good with FILON DR sheets.

Item 13 - Installation of polyester curtain wall sheeting at Bay 6 (High Bay) to prevent dust from fans and settled dust on top of purlins spreading into adjacent bays.

Item 14 - Additional Side Cladding.

Site Notes

Full liaison between **STORM Industrial Roofing Ltd** Staff or operatives and Richard Nurden, Steve Rowley and other ASD Biddulph staff will help ensure the safe and practical completion of this contract.

A site specific method statement and risk assessments will be provided upon receipt of a purchase order.

Item 1 – AREA A – Removal and replacement of all roofs. Installation of 20% roof lights at Bays 4 & 5. No roof lights to be re-instated at Bay 6.

Strip off existing asbestos roof sheets, all associated roof lights and other associated detailing in accordance with current legislation. Lower carefully to ground level and remove from site.

Supply and fix an 80mm deep foam core insulated composite panel with a cover width of approximately 1000 mm.

This is to be fixed in accordance with manufacturers recommendations. This does not comply with current building regulations.

The outer sheet will be of a 0.4 mm gauge with a plastisol coating protective membrane.

The internal liner will be hot dipped galvanised material with a bright white coating to reflect all natural light around the inside of the building.

New sheeting will be fixed to the existing underlying purlins with self-drilling fixings to be fixed to the manufacturer's recommendations.

Sheeting will be stitched at 600mm centres according to the pitch of the roof. All laps will receive a sealant tape in advance of being laid and secured.

The total area proposed to be re-sheeted is 2754 square metres.

Supply and fix 0.7mm plastisol coated flashing details at ridge, barge and eaves areas. These will be mechanically fixed to the new roof sheeted system with self-drilling fixings to manufacturers recommendations.

All fixings will be colour coded to suit client's requirements and surrounding roof area. Fixings around fragile roof light areas to be poppy red in colour to allow clear identification.

DOUBLE SKIN Roof Lights (Bays 4 & 5 only)

Supply and fix DOUBLE SKIN GRP Factory assembled roof lights to manufacturer's recommendations. Inner roof light to have class 1 fire rating. Outer roof light to have class 3 fire rating.

The total area proposed to receive new roof lights is 442 square metres. (20% total roof area of Bays 4 & 5)

Item 2 – AREA B– Over cladding to higher level buildings side cladding to full perimeter and down to existing brickwork level.

Supply and fix new galvanized rail system fixed to the existing structure according to manufacturer's recommendations with self-drilling/tapping fixings.

Supply and fix a new 80mm insulation quilt laid shoulder to shoulder to provide a U value in excess of 0.45 w/mk. This does not comply with current building regulations.

Supply and fix new hot dipped galvanized steel 0.55 mm profiled single skin sheeting with a side lap detail for increased strength and rigidity and a 0.2 mm PVC plastisol outer coating.

All side laps will be stitched at the appropriate centre's with self-drilling fixings according to manufacturer's recommendations.

Sheeting will be fixed to the new rail system and secured in each valley corrugation to manufacturer's recommendations with self-tapping screws incorporating an integral drill point for fixing in one operation.

Supply and fix all new plastisol coated flashing details at barge, eaves and any relevant verticals. These will be fixed in accordance to manufacturer's recommendations.

Supply and finish details with close cell synthetic fillers will be inserted to prevent rainwater ingress. Please note that all foam fillers are to be bedded in mastic and sandwiched between the corresponding flashing details with a main fixing to secure the head of the filler block.

All associated fillers must be 75 mm from the edge of the flashings.

Supply and fix all new colour coded caps to the new fixings.

The total area for re-cladding will be 1620 square metres.

Strip out 266 number of existing deteriorated roof lights. Lower carefully to ground level and remove from site.

Supply and fix 216 number new class one GRP translucent roof lights. These to be fitted to the existing purlins with drill fast tech fasteners.

All side and end laps are to be bedded in mastic.

The area to be treated is 540 linear metres.

- **The current 3 number banks of roof lights to the front elevation will be reduced to 2 number banks to match the rear.**

Item 3– AREA C – Over cladding to customer facing areas front of site and down to existing brickwork level.

Supply and fix new galvanized rail system fixed to the existing structure according to manufacturer's recommendations with self-drilling/tapping fixings.

Supply and fix a new 80mm insulation quilt laid shoulder to shoulder to provide a U value in excess of 0.45 w/mk. This does not comply with current building regulations.

Supply and fix new hot dipped galvanized steel 0.55 mm profiled single skin sheeting with a side lap detail for increased strength and rigidity and a 0.2 mm PVC plastisol outer coating.

All side laps will be stitched at the appropriate centre's with self-drilling fixings according to manufacturer's recommendations.

Sheeting will be fixed to the new rail system and secured in each valley corrugation to manufacturer's recommendations with self-tapping screws incorporating an integral drill point for fixing in one operation.

Supply and fix all new plastisol coated flashing details at barge, eaves and any relevant verticals. These will be fixed in accordance to manufacturer's recommendations.

Supply and finish details with close cell synthetic fillers will be inserted to prevent rainwater ingress. Please note that all foam fillers are to be bedded in mastic and sandwiched between the corresponding flashing details with a main fixing to secure the head of the filler block.

All associated fillers must be 75 mm from the edge of the flashings.
Supply and fix all new colour coded caps to the new fixings.

The total area for re-cladding will be 534 square metres.

Strip out existing deteriorated roof lights. Lower carefully to ground level and remove from site.

Supply and fix new class one GRP translucent roof lights. These to be fitted to the existing purlins with drill fast tech fasteners.

All side and end laps are to be bedded in mastic.

Item 4 – AREA D – Installation of double skin cladding to newly exposed areas at 3 number barge ends and 1 number side elevation down to ground level.

Supply and fix new 3mm purlins in accordance with current manufacturer's recommendations.

Supply and fix a new 0.4 mm new steel liner tray, especially adapted for sound insulated buildings. This to incorporate an attractive bright white external polyester external paint finish.

The paint thickness has a 25 micron nominal thickness and the reverse side of the sheet has a 5 –10 mm micron nominal thickness. This is of a pre-coated hot galvanised steel profile.

The liner panels to be temporarily fixed to the existing purlins with adequate fixings. All profile features to have adjustable laps to permit laying to accurate cover width or to adjust to rolling tolerances of outer cladding.

Supply and fix new galvanized rail system fixed to the existing structure according to manufacturer's recommendations with self-drilling/tapping fixings.

Supply and fix a new 80mm insulation quilt laid shoulder to shoulder to provide a U value in excess of 0.45 w/mk. This does not comply with current building regulations.

Supply and fix new hot dipped galvanized steel 0.55 mm profiled single skin sheeting with a side lap detail for increased strength and rigidity and a 0.2 mm PVC plastisol outer coating.

All side laps will be stitched at the appropriate centre's with self-drilling fixings according to manufacturer's recommendations.

Sheeting will be fixed to the new rail system and secured in each valley corrugation to manufacturer's recommendations with self-tapping screws incorporating an integral drill point for fixing in one operation.

Supply and fix all new plastisol coated flashing details at barge, eaves and any relevant verticals. These will be fixed in accordance to manufacturer's recommendations.

Supply and finish details with close cell synthetic fillers will be inserted to prevent rainwater ingress. Please note that all foam fillers are to be bedded in mastic and sandwiched between the corresponding flashing details with a main fixing to secure the head of the filler block.

All associated fillers must be 75 mm from the edge of the flashings.
Supply and fix all new colour coded caps to the new fixings.

The total area for re-cladding will be 1151 square metres.

Item 5 – AREA E – Replacement of all roof lights including rear of Bay 3.

Strip out 502 number of existing deteriorated roof lights and side roof lights from cladding to rear of Bay 3. Lower carefully to ground level and remove from site.

Supply and fix 502 number new class one GRP translucent roof lights into roof areas and cladding at rear of Bay 3. These to be fitted to the existing purlins with drill fast tech fasteners.

All side and end laps are to be bedded in mastic.

The area to be treated is 1004 linear metres.

Item 6 – AREA F – Installation of double skin cladding to newly exposed areas at 1 number rea elevation at Bay 3 and down to ground level.

Supply and fix new 3mm purlins in accordance with current manufacturer's recommendations.

Supply and fix a new 0.4 mm new steel liner tray, especially adapted for sound insulated buildings.

This to incorporate an attractive bright white external polyester external paint finish.

The paint thickness has a 25 micron nominal thickness and the reverse side of the sheet has a 5 –10 mm micron nominal thickness. This is of a pre-coated hot galvanised steel profile.

The liner panels to be temporarily fixed to the existing purlins with adequate fixings. All profile features to have adjustable laps to permit laying to accurate cover width or to adjust to rolling tolerances of outer cladding.

Supply and fix new galvanized rail system fixed to the existing structure according to manufacturer's recommendations with self-drilling/tapping fixings.

Supply and fix a new 80mm insulation quilt laid shoulder to shoulder to

provide a U value in excess of 0.45 w/mk. This does not comply with current building regulations.

Supply and fix new hot dipped galvanized steel 0.55 mm profiled single skin sheeting with a side lap detail for increased strength and rigidity and a 0.2 mm PVC plastisol outer coating.

All side laps will be stitched at the appropriate centre's with self-drilling fixings according to manufacturer's recommendations.

Sheeting will be fixed to the new rail system and secured in each valley corrugation to manufacturer's recommendations with self-tapping screws incorporating an integral drill point for fixing in one operation.

Supply and fix all new plastisol coated flashing details at barge, eaves and any relevant verticals. These will be fixed in accordance to manufacturer's recommendations.

Supply and finish details with close cell synthetic fillers will be inserted to prevent rainwater ingress. Please note that all foam fillers are to be bedded in mastic and sandwiched between the corresponding flashing details with a main fixing to secure the head of the filler block.

All associated fillers must be 75 mm from the edge of the flashings.

Supply and fix all new colour coded caps to the new fixings.

The total area for re-cladding will be 487 square metres.

Item 7 – BAYS 1,2,3,4,5,6 Installation of jointless plygene liner systems to all gutters. Replacement gutters to first be carried out at Bays 4 & 5.

Bays 4 & 5 (Removal and Replacement)

Carefully Strip out existing gutters. Lower to ground level and remove from site.

Supply and fix new 2 mm galvanised interlocking gutter sections laid into new brackets.

Gutter joints will be fixed according to manufacturer's recommendations and sealed with specific gutter seal butyl mastic.

Supply and fix new outlets at size appropriate to gutter. These are to be fitted into the existing downpipes.

Supply and fix all stop ends inclusive of weir overflows if gutters propose an overflowing concern.

The gutters are to be renewed to 92 linear metres.

Bays 1,2,3,4,5 and 6 (Gutter Liner Installation)

Carefully access the work locations following provided method statements closely.

Temporarily cover existing outlets as work progresses to minimize debris falling into down pipes. Gutters are to be cleaned away from down pipe into central locations.

Existing gutters to be cleaned to industrial standards. All debris is to be lowered to ground and removed from site.

The area to be cleaned is 474 linear metres.

Supply and fix new PVC "Sharman" high performance polyene gutter liners to manufacturer's recommendations. This to be creased and manufactured to existing gutter dimensions.

The area to receive polyene liners is 474 linear metres.

Please Note: We have not quoted for any works to the down pipes or underground drainage. We would suggest these are checked at the next convenience by a registered specialist drainage contractor.

Item 8 – BAY 1 – Replacement of 16 number roof lights to front cladding and installation of corner section flashings to damaged areas

Roof Lights

Strip out 18 number of existing deteriorated roof lights. Lower carefully to ground level and remove from site.

Supply and fix 16 number new class one GRP translucent roof lights. These to be fitted to the existing purlins with drill fast tech fasteners.

All side and end laps are to be bedded in mastic.

The area to be treated is 43 linear metres.

Flashing Repairs to damaged corners

Supply and fix new 0.7mm plastisol coated purpose made detailed flashings. The contractor to ascertain if any shadow line is required.

All flashings are to be fixed with self-drilling tec fixings at the appropriate centres.

The area to be treated is 33 linear metres.

Item 9 – BAYS 1, 2 and 3 – Installation of 25 number FILON overlay sheets to damaged asbestos and removal of loose internal liner panels.

Liner Panels

Carefully access and remove a total number of 25 loose internal lining panels. Lower to ground level and remove from site.

Overlay Sheets

Carefully remove all of existing roof sheet hook bolts. These to be carefully cropped from roof with ground space to be managed below.

Supply and fix 25 new Class 3 1.83 kg GRP overlay sheet to manufacturer's recommendations directly over deteriorated area to be tucked under prevailing sheet lap.

The total area to be treated is 75 square metres.

Item 10 – Installation and flashing to 3 number external Fire Doors at South Wall and Rear Elevation

Supply and fix 3 number steel fire doors with powder coated finish (similar colour to cladding) at 2040mm x 826mm each. Doors to include panic bar and anti-jemmy lip around frame.

Supply and fix new 0.7mm plastisol coated purpose made detailed flashings. The contractor to ascertain if any shadow line is required.

All flashings are to be fixed with self-drilling tec fixings at the appropriate centres.

Item 11 – Replacement of 4 number asbestos downpipes to rear of Bay 3, Re-direction of 2 number cast downpipes at Bay 5 and installation of additional new downpipe at Bay 5.

Carefully Strip out 4 number asbestos downpipes at Bay 3 and 2 cast number downpipe top sections at Bay 5. Lower to ground level and remove from site.

Supply and fix new 7 number new downpipes 6 inch PVC downpipe sections laid into newly supplied and fixed brackets down to ground level all secured external of the building to the rear of site.

Carry out inspection to other downpipes currently thought to reside internally of feature steelwork columns. Rod to ground level and ensure free flowing.

Item 12 – BAYS 1,2 & 3 - Removal of all redundant ventilations fans including 2 number large sections of ducting located adjacent to valley gutters and make good with FILON DR sheets.

FILON DR Sheets

Carefully remove all of existing redundant ventilation units and 2 number large sections of ducting, along with all adjacent roof sheet hook bolts. These to be carefully cropped from roof with ground space to be managed below.

Supply and fix new FILON DR 2.66 kg GRP overlay sheet to manufacturer's recommendations directly over deteriorated area to be tucked under prevailing sheet lap.

The total area to be treated is 27 square metres.

Item 13 – BAYS 6 – Installation of polyester curtain wall sheeting

Carefully supply and fix a polyester (or similar) curtain wall sheeting to prevent the spread of settled dust from fans or tops of purlins into the adjacent working bay areas.

This to be fixed in accordance with manufacturer's recommendations.

Stoppers are to be introduced on cranes to prevent "through access" and allow curtain wall to remain in situ until associated roof work is complete.

The area to be treated is approximately 390 metres squared.

Item 14 – Additional Side Cladding to Dock Leveller

Supply and fix a new 0.4 mm new steel liner tray, especially adapted for sound insulated buildings. This to incorporate an attractive bright white external polyester external paint finish. The paint thickness has a 25 micron nominal thickness and the reverse side of the sheet has a 5 –10 mm micron nominal thickness. This is of a pre-coated hot galvanised steel profile.

The liner panels to be temporarily fixed to the existing purlins with adequate fixings.

All profile features to have adjustable laps to permit laying to accurate cover width or to adjust to rolling tolerances of outer cladding.

Supply and fix new galvanized rail system fixed to the existing structure according to manufacturer's recommendations with self-drilling/tapping fixings.

Supply and fix a new 80mm insulation quilt laid shoulder to shoulder to provide a U value in excess of 0.45 w/mk. This does not comply with current building regulations.

Supply and fix new hot dipped galvanized steel 0.55 mm profiled single skin sheeting with a side lap detail for increased strength and rigidity and a 0.2 mm PVC plastisol outer coating.

All side laps will be stitched at the appropriate centre's with self-drilling fixings according to manufacturer's recommendations.

Sheeting will be fixed to the new rail system and secured in each valley corrugation to manufacturer's recommendations with self-tapping screws incorporating an integral drill point for fixing in one operation.

Supply and fix all new plastisol coated flashing details at barge, eaves and any relevant verticals. These will be fixed in accordance to manufacturer's recommendations.

Supply and finish details with close cell synthetic fillers will be inserted to prevent rainwater ingress. Please note that all foam fillers are to be bedded in mastic and sandwiched between the corresponding flashing details with a main fixing to secure the head of the filler block.

All associated fillers must be 75 mm from the edge of the flashings.

Supply and fix all new colour coded caps to the new fixings.

The total area for re-cladding will be 24 square metres.

The cost

The cost of Items 1-14 including all relevant and stated Health and Safety is £493,000 (FOUR HUNDRED AND NINETY THREE THOUSAND POUNDS).

Health and Safety to all items above

(Site specific Method Statement and Risk Assessment provided upon receipt of purchase order for work)

Scaffolds

Install all independent scaffold and edge protection handrail in accordance with current guidelines to follow best practise recommendations from the HSE.

Safety Netting (Roof)

Supply and fix internal safety netting to control the risk of falls from the leading edges. This netting is to be fixed to the underside of the existing purlins. This would form a fall and arrest system.

All safety netting would be fitted in accordance FASET regulations and the Health and Safety at Work Act 1974.

Access, Egress and Disposal

Included is the necessary powered access i.e. wide platform scissor lift platform. In addition harnesses, lightweight crawling boards and specialist asbestos and general waste skips to be provided.

Asbestos Air Monitoring

We would strongly recommend Air monitoring is carried out.

This will ensure that all concentrated airborne asbestos dust particles will comply with the Working with Asbestos Cement regulations.

The test would typically include:

- Site overview and also survey conditions.
- Monitoring method.
- Results Analysis
- Conclusions
- Risk Assessment
- Further actions recommended
- Analysis Certificates

Structural Engineer

In the proposal of the above specification we have made the presumption that the existing structure (including purlins) is able to accept the additional loadings specified.

However, we are not structural engineers and cannot accept responsibility for the existing structures stability.

We would therefore strongly suggest that the services of a structural engineer are engaged to determine and calculate whether the existing structure can/cannot accept the newly proposed over clad weight loadings.

Our quotation does not include VAT. This will be added to our invoices at the standard rate.

STORM Industrial Roofing Ltd cannot be held responsible for any damage to existing services on site such as alarm systems, security systems, pipe work, cabling or other conduit attached either directly on top or to the underside of roofing or cladding areas to be worked upon. It is the client's responsibility to locate and temporarily remove any such items before works commence either themselves or using a specialist contractor.

Where adjoining sections of roof remain unrepaired and it is unfortunately possible that leaks may still occur at areas untreated.

A full refurbishment is the only way to provide a guaranteed watertight solution.

Payment will be required **30 days end of month**. Interims on larger contracts may be required.

Non-payment of invoices by the date due will invalidate any guarantees at contractor's discretion.

Please also note our Conditions of Business, sent under separate cover, which will apply when our Specification and Quotation is accepted.

We hope **STORM Industrial Roofing Ltd** can be of assistance on this occasion; please do not hesitate to contact me should you wish to discuss any details.

Yours sincerely

Nick Hughes

Technical Sales Manager

07715 497 207

nick@stormindustrialroofing.co.uk

www.stormindustrialroofing.co.uk