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STORM DAMAGE REPAIR AND RESTORATION OF RUSSEL HIGH SCHOOL PIETERMARITZBURG, KZN

149 Hoosen Hafejee St and 130 Boom street.

BROSELY ROOF TILES

Existing Broseley round-nose roof tiles occur in two sizes :

Half-round end tile : 360x174mm

Flat curve end-tile : 345x170mm,

Tiles are to be cleaned and reused, new/ reclaimed matching tiles are available from www.Billmark.co.za. Remove all roof tiles systematically, taking care to cover exposed roof each day. Remove and replace all battens with new 38x38 treated SAPine at approx.150mm centres to match existing. Lichen to be removed from the clay tile by hand, no high-pressure cleaning is allowed. Re-lay tiles, notched over new battens on top of new "Durafoil" , or equal approved insulating underlay.



130 BOOM STREET



RUSSELL HIGH SCHOOL

GUTTERS AND DOWNPIPES

Existing Cast iron Gutters and downpipes:

All existing gutters to be inspected and assessed for repair or replacement. Clean out all debris and plant matter and rod down pipes to ensure flow of water. All junctions in downpipes, holderbats and shoes to be assessed. Rusted and irreparable gutters are to be replaced with aluminium 6inch domestic Ogee gutters. Repair method is to be recommended by the specialist and approved by the Heritage architect for specific applications.

Existing aluminium gutters and downpipes:

All existing gutters to be inspected and assessed for repair or replacement. Clean out all debris and plant matter and rod down pipes to ensure flow of water. All junctions in downpipes, holderbats and shoes to be assessed. Where necessary, gutters are to be replaced with aluminium 6inch domestic Ogee gutters. Where existing gutters are repaired, repair method is to be recommended by the specialist and approved by the Heritage architect for specific applications.

Gutter Linings :

Existing Galvanised Mild Steel linings to box gutters, valleys and flashings are to be lifted and original lead linings to be inspected. The condition of the lead is to be assessed. New lead linings are recommended to replace damaged lead and GMS linings. The timber frames of the box gutters are to be inspected and all rotten timber replaced with treated timber to match existing.

Downpipes :

Replace damaged sections of downpipes to match existing as directed by architect, existing cast iron header boxes and holder bats to be inspected for leaks and sturdiness. Existing inadequate PVC junctions to be replaced with aluminium downpipes sized to match the existing cast-iron downpipes, rubber seals to be used between cast-iron and aluminium. Refer to proposed storm water management system for recommendations for the problem of flooding at ground level. New additional down pipes may be necessary. Downpipes concealed in internal ducts are to be exposed and thoroughly inspected before recommendations are made. Check all down pipes, rain water heads and connections for leaks. Connections to be sealed by specialist.

Box gutter repairs :

All repairs are to be made in accordance with the traditional methods of timber construction shown in the typical details below, but with new treated timber. Box gutter conditions at Russell High School are "Side wall gutter" (fig 68 below) and "Central box gutter" (fig 72).

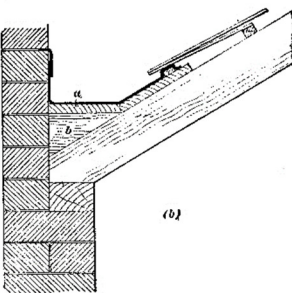
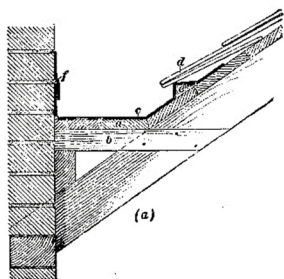


FIG. 68

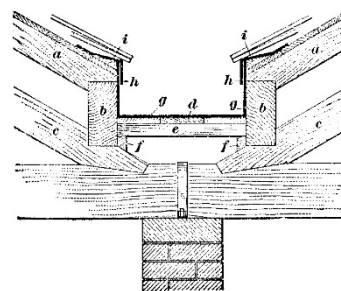


FIG. 72

Reference : International Correspondence School Ltd. (ICS) London, Reference Library (approx. 1930) Volume 40D



Underside of box gutter above the library



RW pipes in the roof above the library



Damaged rafters in the library roof space

Russel High School 149 Hoosen Haffajee St and 130 Boom St – gutters and roof tiles



RHS central box gutter and channel above the library