# **EXISTING ROOF MODIFICATION FOR NEW WORK**

### 1. GENERAL

## 1.1 General Requirements

.1 Maintain the existing building watertight at all times. Provide required temporary protection, and enclosures. Seal off or temporarily dam open roof edges to prevent any incidence of water into existing building or structure.

### 1.2 Quality Assurance

- .1 Tie-in new Work with adjacent existing roofing system in accordance with the Manufacturer's recommendations for the products used. All products to be compatible with the existing roof system components.
- .2 All Work shall meet the requirements of the Canadian Roofing Contractors' Association (CRCA) as amended by affiliated provincial roofing association, including all amendments up to project date.
- .3 Applicators: Member in good standing of the Canadian Roofing Contractors' Association affiliated provincial association and which has a minimum of five (5) years of proven satisfactory experience in the Work of this Section.
- .4 Ensure surfaces to receive Work of this Section are clean, level, smooth, solid and dry before commencing work each day.
- .5 Ensure temperatures during application are not less than the minimum recommended by the material manufacturer. Work shall not be carried out during inclement weather conditions.
- .6 Stop Work when temperature remains consistently below -18°C, especially when wind chill effect would tend to set bitumen before proper adhesion takes place.
- .7 Use only dry materials and apply only during weather that will not introduce moisture into roofing system.
- .8 Arrange for roofing material Manufacturer's Representative to visit the Site and discuss roofing application and any special requirements, prior to commencement of Work.

# 1.3 Protection

- .1 Provide all necessary protection measures to prevent fumes, dust particles, odours and other foreign matter created or caused by roofing operation from entering the building, including the return air ducts.
- .2 Cover walls and adjacent Work where materials hoisted or used. Locate equipment to prevent smoke and fume against discolouring the building or adjacent buildings or becoming a nuisance to adjacent owners or the public.
- .3 Provide temporary protection at work areas or access to work areas with minimum 13 mm (1/2 inch) plywood underlaid with 25 mm (1 inch) polystyrene insulation board extending 900 mm (36 inch) beyond work area. Remove protection at completion of Work.

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- .4 Use warning signs and barriers. Maintain in good order until completion of Work.
- .5 At end of each day's Work or when stoppage occurs due to inclement weather, provide protection for completed Work and materials out of storage.
  - .1 Provide cut-offs against water intrusion into uncompleted Work and existing building. Remove cut-offs at commencement of subsequent Work.

#### 1.4 Delivery, Storage and Handling

- .1 Deliver materials in original containers, sealed, with labels intact.
- .2 Do not store insulation in direct contact with the earth, road surface, or roof deck. Place suitable supports under the insulation upon delivery to protect it from absorbing dampness from the surrounding terrain or deck.
- .3 Provide and maintain dry, off-ground weatherproof storage. Take particular care to prevent materials from absorbing moisture. Remove unsatisfactory materials promptly and provide new dry materials.
- .4 Remove only in quantities required for same day use.
- .5 Remove and replace damaged, wet or broken materials.
- .6 Store materials away from open flame or ignition sources.

#### 1.5 Warranty

- .1 Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during Work, by methods and with materials so as not to void existing roofing system warranty. Notify warrantor before proceeding.
  - .1 Notify warrantor of existing roofing system on completion of Work, and obtain documentation verifying that existing roofing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

#### 2. PRODUCTS

## 2.1 Materials

.1 Roofing Materials: New materials, same as and matching materials used in the existing roof system.

### 3. EXECUTION

# 3.1 Roofing

- .1 Preparation: Prepare existing roof for receipt of new Work. Ensure existing system is not damaged by preparation Work.
  - .1 Remove only areas of the existing roofing system which can be replaced, complete with membrane flashings, on the same day.

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- .2 Built-Up System: Remove existing top pour and aggregate cover back 900 mm (36 inch) from replacement area. Sweep all loose gravel back an additional 900 mm (36 inch).
- .2 Roofing and Flashing membrane: Install in accordance with Manufacturers' instructions.
- .3 Curbs: Install curbs required for new Work.

### 3.2 Sleeve Flashing

- .1 Prefabricated purpose made to suit pipes and penetrations.
- .2 Embed deck flange in a layer of mastic sealer. Flash into the roofing membrane in general accordance with CRCA flashing detail.
- .3 Apply sealant at joint between base of sleeve flashing and roof membrane flashing.

## 3.3 Installation - Metal Flashings and Trims

- .1 Install sheet metal work in accordance with CRCA specifications, using concealed fastenings except where approved before installation.
- .2 Fabricate metal flashings and other sheet metal work to details shown. Form pieces in 2400 mm (8 feet) maximum lengths. Make allowance for expansion at joints.
- .3 Hem exposed edges on underside 13 mm (1/2 inch). Miter and seal corners with sealant.
- .4 Form sections square, true and accurate to size, free from distortion and other defects detrimental to appearance or performance.
- .5 Apply isolation coating to metal surfaces to be embedded in concrete or mortar.
- .6 Counterflash membrane flashings at intersections of roof with vertical surfaces and curbs. Flash joints using S-lock forming tight fit over hook strips.
- .7 Lock end joints and seal with sealant.

# 3.4 Cleaning

- .1 Remove existing debris from all roof areas.
- .2 Clear out roof drains, scuppers, eaves troughs and down spouts of debris and ensure they are free draining at project completion.
- .3 Remove surplus materials and debris resulting from Work daily as the Work proceeds and on completion.
- .4 Remove stains, sealants and adhesives from soiled surfaces.

# END OF SECTION