

## **Amendments to COPEH for the Removal of Roof Gutters for A&A or Reconstruction Works involving Roof Structures**

Reference: NEA-EHDHQ-CIRCULAR-COPEH-00003

Date: 22 Aug 2016

### **CIRCULAR TO PROFESSIONAL INSTITUTES**

#### **Who should know**

Developer, Architects, Engineers, Contractors and Builders

Dear Sir/Madam,

#### **Amendments to COPEH for the Removal of Roof Gutters for A&A or Reconstruction Works involving Roof Structures**

Following the ban on roof gutters for new developments in 2005, NEA had amended the Code of Practice for Environmental Health (COPEH) under section 9 to require the removal or sealing up of roof gutters for all building works (i.e. A&A & reconstruction works) involving roof structures from **1 Sep 2016**. Please refer to Annex A for the revised Section 9 of the COPEH.

2 NEA had consulted professional institutes/PUB/BCA on this requirement in 2015 and early 2016 before the implementation. This measure is implemented to prevent mosquito breeding in roof gutters as roof gutters are difficult to inspect and maintain. The implementation of Ministry of Manpower (MOM)'s Workplace Safety and Health (Work at heights) regulation in 2014 had further impeded inspections and maintenance of roof gutters.

3 QPs should consider alternative designs/solutions (please refer to examples in Annex B) in the absence of roof gutters to ensure effective conveyance and drainage of rain water, to minimise any splashing of rain water into neighbouring developments.

4 For further enquiries, please contact NEA Hotline at 1800-2255 632 or submit them electronically via the Online Feedback Form at <http://www.nea.gov.sg/corporate-functions/feedback> or mobile application (myENV). We would appreciate if you could disseminate the content of this circular to your members. Thank you.

Sincerely



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Tai Ji Choong  
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cc     The President  
         Singapore Institute of Architects (SIA)

         The President  
         Association of Consulting Engineers Singapore (ACES)

         The President  
         The Institute of Engineers Singapore (IES)

         The President  
         Real Estate Developers' Association of Singapore (REDAS)

         The President  
         Singapore Contractors Association Limited (SCAL)

         Group Director (Building Plan & Management Group)  
         Building Control Authority (BCA)

         Director (Catchment & Waterways Department)  
         Public Utilities Board (PUB)

## REVISED SECTION 9 OF COPEH

### 9 ANTI-MOSQUITO BREEDING

#### 9.1 Objective

During the design of any building or structures, the QP shall take into consideration and avoid features that may result in water stagnation and become potential breeding habitat for mosquitoes. Any part of a building where water stagnation may occur shall be provided with permanent and safe access for maintenance purpose.

#### 9.2 Roof Gutter

- a. With effect from 1 Nov 2005, no roof gutters shall be installed for any new developments.
- b. With effect from 1 Sep 2016, existing roof gutters shall be removed or sealed up in all building works involving roof structures which are also A&A or reconstruction works, where such building works are as defined under the Building Control Act.
- c. Qualified Persons (QP) are advised to consider alternative designs/solutions to ensure effective conveyance and drainage of rain water.

#### 9.3 Air-Conditioning Tray

No tray or receptacle shall be placed beneath and/or on top of any air-conditioning

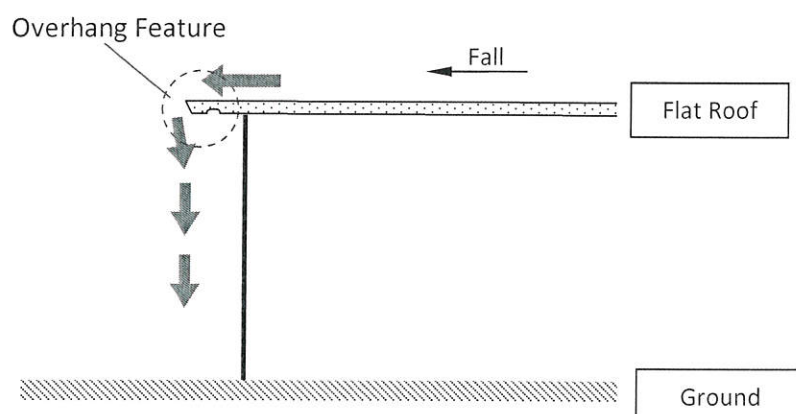
#### 9.4 Floor Trap

Adequate measures, such as installation of anti-mosquito devices at the floor trap, shall be taken to prevent mosquitoes from breeding in the water seal of the floor trap.

## EXAMPLES OF ALTERNATIVE DESIGNS/SOLUTIONS

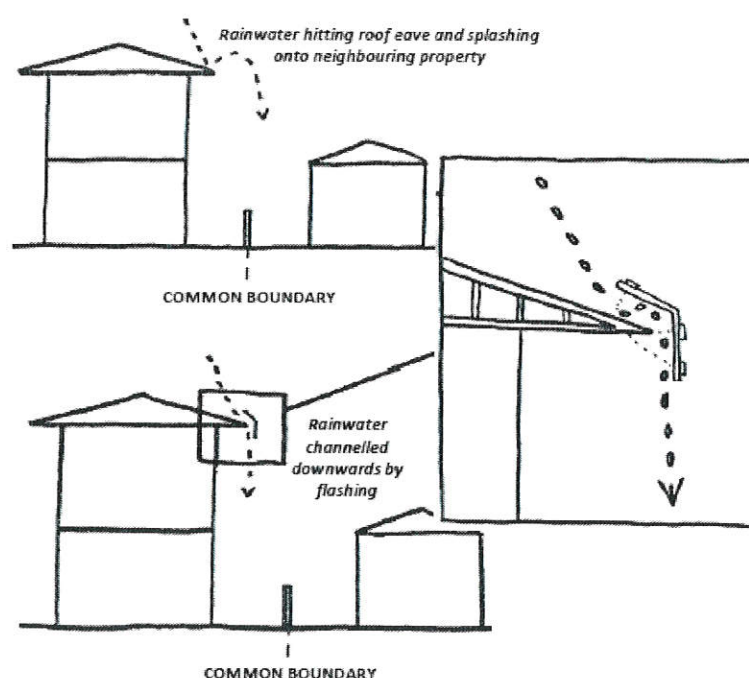
### Example 1: Design Overhang Feature for Flat Roofs

Overhang feature can be incorporated to allow rainwater to free fall from roof edges without leaving unsightly marks / lines on façade walls caused by rainwater carrying dirt from the roof.



### Example 2: Install Flashings

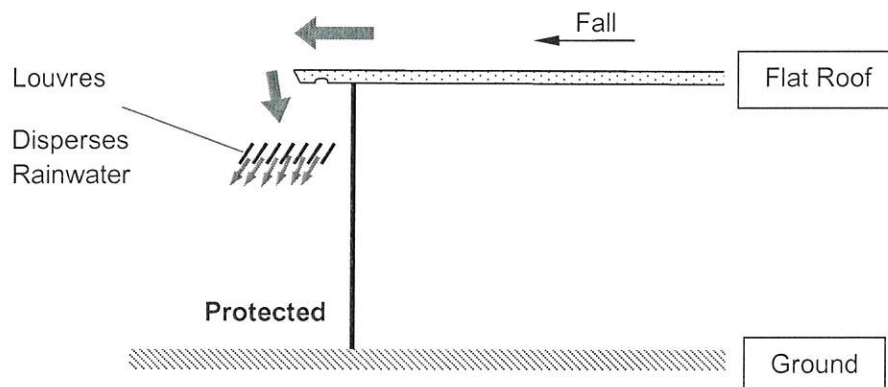
Flashings can be installed on the edges of the roof to prevent water splashing into neighbouring developments.



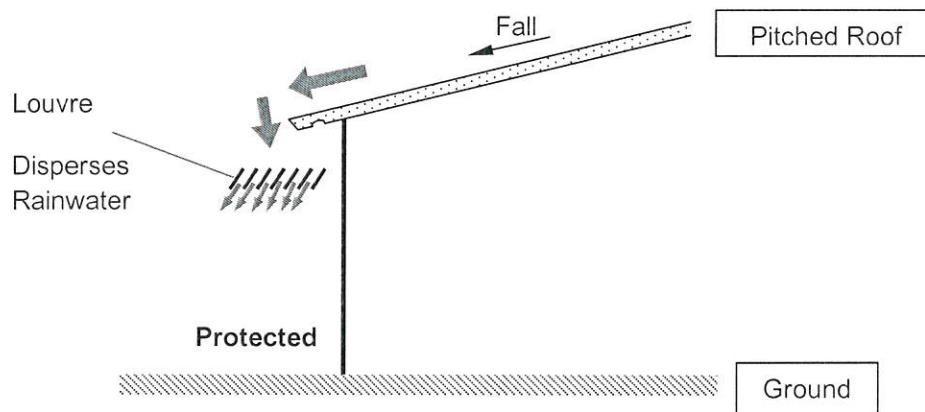
### Example 3: Use of Louvres

Louvres can be designed to disperse rainwater, protect the landscaping and reduce harsh splashing.

#### For Flat Roof



#### For Pitched Roof



#### Example 4: Divert Water from Passage Way

Rainwater can be diverted to reduce splashing impact on landscaping or to reduce splashing nuisance on doorways.

