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Building Engineering Division

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**See Distribution List**

Dear Sirs

**QUALITY OF STRUCTURAL STEEL SECTIONS**

Structural steel sections used in Singapore are imported from various countries and manufactured to different quality and material specifications. Some of these steel sections do not comply with the Singapore or British Standards in terms of material properties on the yield and ultimate strengths, as well as the dimension and tolerance. In addition, cold-formed steel sections could also be mistaken and substituted as hot-formed steel sections even though the design and steel properties are different.

2 Therefore, the Commissioner of Building Control would like to advise qualified persons (QPs), builders and site supervisors to be vigilant in the inspection, testing and supervision of the structural steelworks. They should ensure that :

- i) the material specifications for steel structures comply with the relevant Singapore or British Standards;
- ii) the dimensions and thickness of the steel sections are checked when delivered to the site as there could be variations beyond the dimensional tolerance allowed in the code;
- iii) sufficient tests are carried out on structural steel sections to verify that the steel quality and specifications conform to the standards. Mill or manufacturer's certificates issued for the structural steel sections should not be taken as proofs that the steel quality is acceptable.

3 In addition, QPs are also advised to adopt the National Productivity and Quality Specifications, (NPQS) eg Section C5 -10: "Specification for Structural Steelwork", for their projects to achieve quality in the construction of steel structures. For large projects involving steel structures, an Independent Testing Agency should be appointed to inspect, check and test the quality of the steelworks.

4 I would appreciate it, if you could disseminate the contents of this advisory note to your members. If you need any clarification, please contact our senior manager, Mr Chew Keat Chuan at Tel 63257585. Thank you.

Yours faithfully

ONG CHAN LENG  
DIRECTOR  
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For COMMISSIONER OF BUILDING CONTROL

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