

SHEAR IMPROVEMENT TO SHEAR DESIGN

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CHAPTER G Specification for Structural Steel Buildings

Specification for Structural Steel Buildings, Part 5, Section 5.10, Strength of Plate Girders in Shear



Figure 5.10.1: Shear Test Specimen

Specification, Strength of Plate Girders in Shear

Strength of Webs without Tension Field Action

Specification, does

Specification, Strength of Plate Girders in Shear

h/t_w

Eurocode 3

Specification

h/t_w

h/t_w

C_p

Specification

h/t_w

h/t_w

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$$V_n = F_y t_w d C_v \quad (Spec. 17.2 - 1)$$

$$C_v = \frac{h/t_w}{k_v E/F_{yw}} \quad (Spec. 17.2 - 3)$$

$$C_v = \frac{k_v E/F_{yw}}{h/t_w} \cdot \frac{h/t_w}{k_v E/F_{yw}} \quad (Spec. 17.2 - 1)$$

Specification,

$$F_y$$

$$h/t_w$$

$$h/t_w$$

Specification

$$h/t_w$$

Specification.

Strength of Webs with Tension Field Action

a/h

Specification

h/t_w

h/t_w

$$V_n = F_{yw} t_w d C_v + \quad (Spec. 17.2 - 1)$$

Specification,

Specification,



