Design of Curved Members/Façade Attachments
Quiz for Session 8: Façade Attachments - Building Lateral Drifts– August 6, 2018
Due: August 27, 8:00 a.m. EDT – Submit through the online form

AISC Night School

1. In modern buildings, you only have to accommodate drift in the attachments of:
    a. Glass and aluminum curtain walls
    b. Masonry Veneer but not the backup
    c. Masonry Veneer and the backup
    d. Precast concrete panels
    e. A,B,and D
    f. A,C,and D

2. A building with continuous strip windows is most likely to use this strategy(s) for accommodating out-of-plane movement:
    a. Rigid body translation
    b. Rigid body rotation
    c. Distortion
    d. A and B

3. Which of the following statements are true regarding accommodating in-plane drift with rigid body rotation:
    a. Connections allow vertical and horizontal movement
    b. Affects both vertical and horizontal joints
    c. Best with tall, narrow panels
    d. All of the above

4. Which of the following façade panel types can accommodate in-plane drift with racking:
    a. Precast concrete
    b. Metal panels on metal stud backup
    c. Stucco on metal stud backup
    d. Stick built aluminum curtain walls
    e. B, C, and D
    f. All of the above

5. Most building codes require that the lateral drift from wind loads is limited to:
    a. h/400
    b. h/600
    c. h/400 to h/600
    d. No code limit

6. The ASCE 7 seismic forces used for checking that panel joint widths can accommodate lateral seismic drift are:
    a. Given in Chapter 13
    b. From Chapter 12 but amplified by I_e in Chapter 13
    c. From Chapter 12 but without C_d
    d. Not given, it's designer judgement

7. If you meet the seismic drift limits given in Chapter 12 of ASCE 7, you will protect the façade elements from damage in a design-level earthquake.
    a. True
    b. False

8. Connections that accommodate story drift by bending of threaded rods must meet length-to-diameter limits and material properties given in ASCE 7:
    a. To limit deformation
    b. To prevent low-cycle fatigue
    c. To prevent corrosion

9. True or False: Rigid body rotation can be difficult to achieve for in-plane drifts for panels with low aspect ratios because of the high level of bi-directional movement demanded at the corners of a given panel.
    a. True
    b. False

10. Why are there often large movement joints at building corners?
    a. Because this area of the building experiences the greatest drift demands
    b. Because of local deformation of the corner column
    c. Because both the in-plane drift demands of one building face and the out-of-plane drift demands of another building face must be accommodated at this location
    d. Because architects are not concerned about aesthetic issues at building corners