

*Bringing ideas
to life*

Low Damage Design

Geoff Sidwell



aurecon

Bellagio Apartments the First SHJ Frame

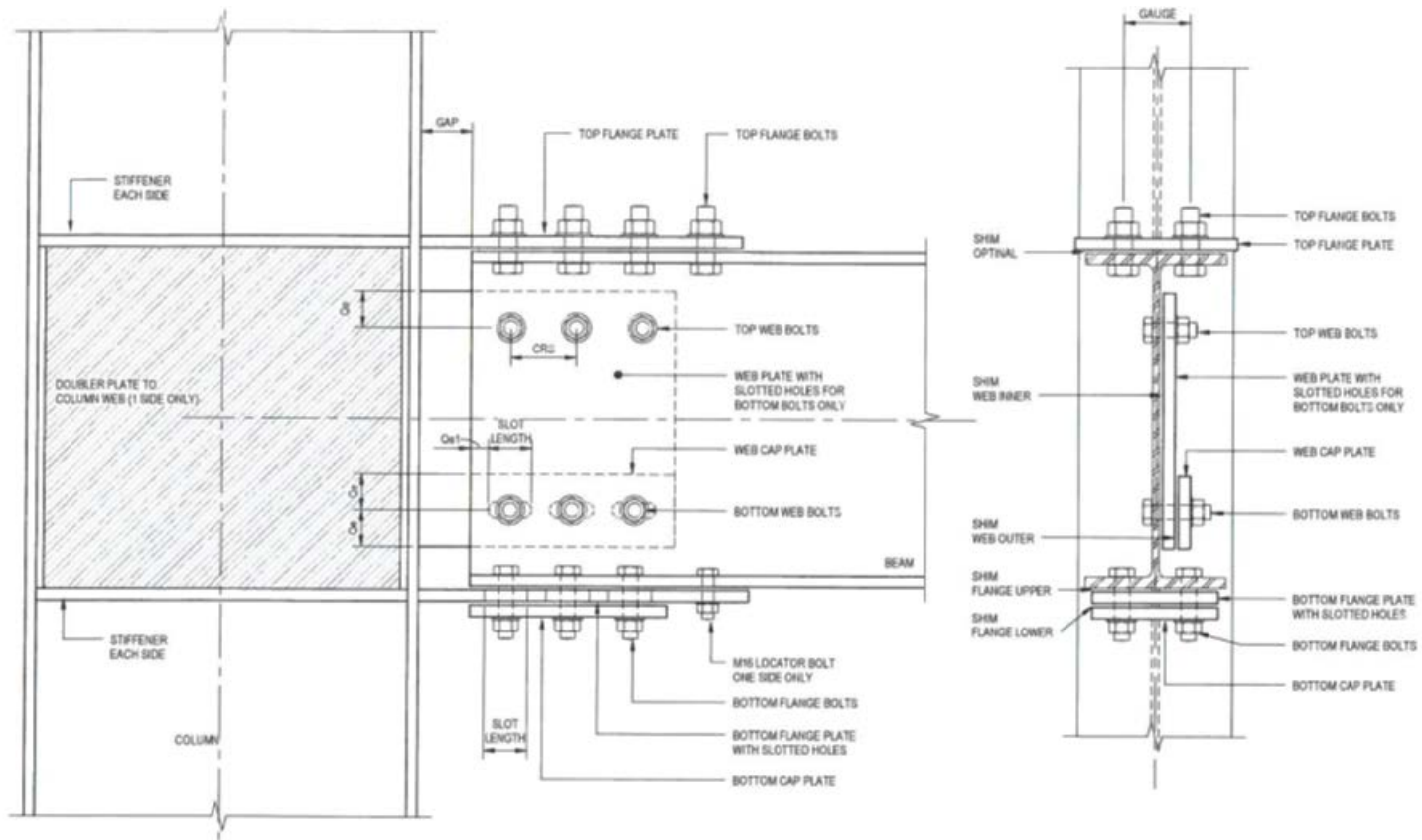


- Longitudinal - SHJ moment resisting frame
- Transverse - Eccentrically Braced Frames
- Comfloor 80 Steel Deck.
- GRC Panel Facade

Te Puni Village

- Transverse Rocking Braced Frames – Longitudinal Moment Resisting Frames
 - Rocking Concentrically Braced Frames with RingFeder tension limiting devices.
 - Sliding Hinge Beam Column Joints longitudinal Moment Frames
 - Column Base Protection to bases of Columns of Moment Resisting Frames

Anatomy of a Sliding Hinge Joint

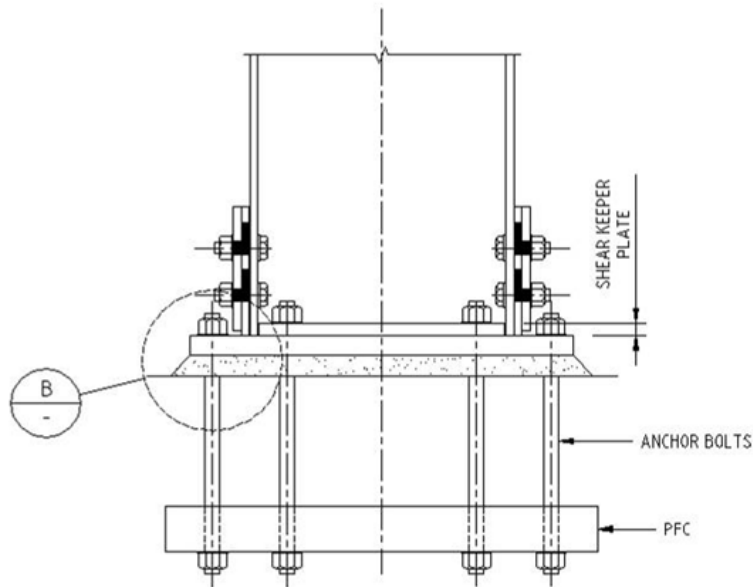


Benefits of Sliding Hinge Joints



- Rotates about top flange
– protects floor diaphragm
- Decouples stiffness and strength
- An economic connection
- Easy to erect

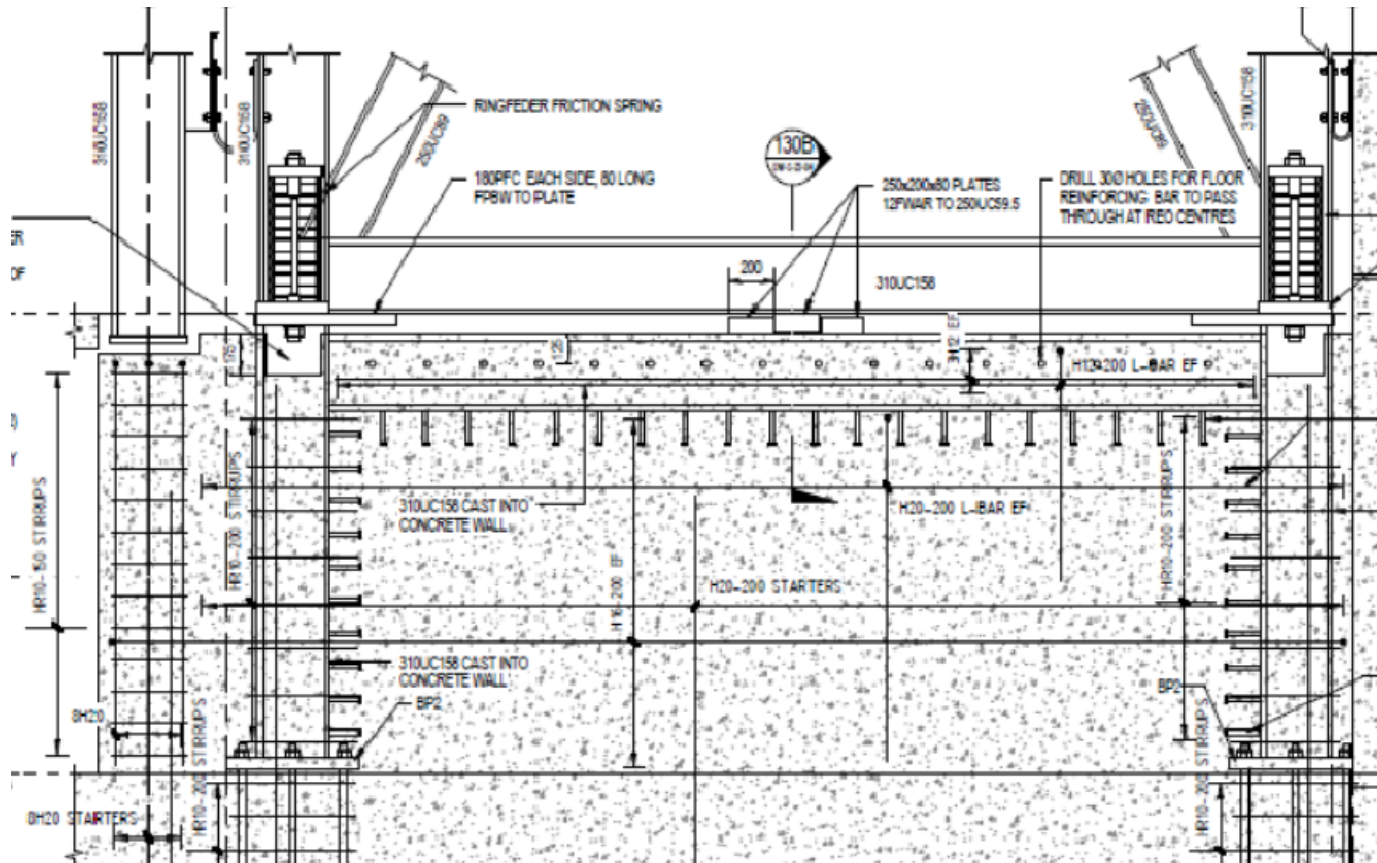
Column Base Details



COLUMN BASE
VERTICALLY ORIENTATED SHJ'S

- Devised to accommodate the inevitable inelastic rotation required at the superstructure to foundation interface.

Anatomy of a RingFeder Rocking Base Connection



RingFeder Rocking Base



Some Aurecon Low Damage Projects

Sliding Hinge Joints		
Belagio Apartments		
Te Puni Village		
Elevate apartments		
Rugby Street Apartments		
Rutherford House Annex		
Protected Column Base Hinges		
Te Puni Village		
Elevate apartments		
Rugby Street Apartments		
RingFeder Rocking Frames		
Te Puni Village		
Tait Electronics		
Elevate apartments		
141 Cambridge Terrace		