**Design Considerations:**

- Can transfer diaphragm shear
- Can provide lateral brace for beam
- Potential to develop negative moment in slabs

**Fabrication Considerations:**

- Plates in beam must align with slab joints allowing tolerance

**Erection Considerations:**

- Connection can be completed with a follow-up crew
- Lateral bracing for beam will not be provided until keyway grout cures

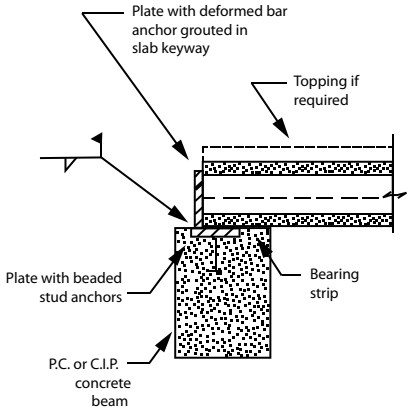


Fig. 5.3.9

**Design Considerations:**

- Can transfer internal diaphragm forces
- Can be designed as structural integrity tie

**Fabrication Considerations:**

- Clean and simple

**Erection Considerations:**

- Clean and simple
- Keyway dimensions may limit the reinforcement diameter

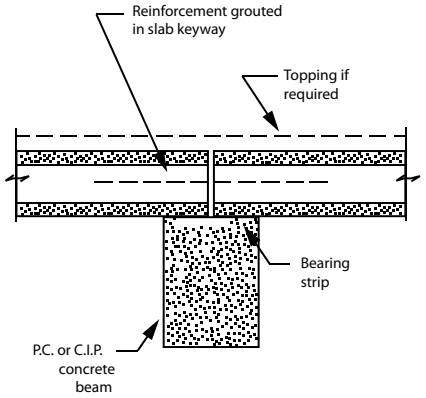


Fig. 5.3.10

Fig. (3.17e) Connections





TABLE OF CONTENTS

**Design Considerations:**

- Can transfar diaphragm shear
- Can be designed as structural inegrity tie

**Fabrication Considerations:**

- Clean and simple for both beam and slabs
- Dowels from beam may present safety hazard

**Erection Considerations:**

- Reinforcement must be tied in place
- Concrete must be cast around reinforcement
- Edge form is required for cast-in-place concrete
- Dowels from beam may present safety hazard

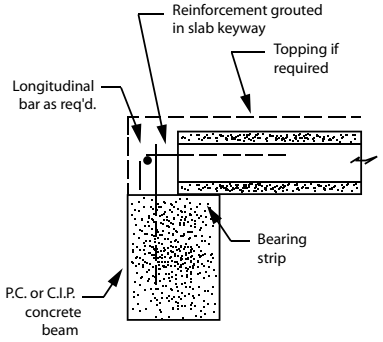


Fig. 5.3.11

**Design Considerations:**

- Can transfer internal diaphragm forces
- Will develop volume change restraint forces that must be considered in design of connection

**Fabrication Considerations:**

- Slab manufacturing system must allow bottom weld inserts
- Beam and slab inserts must align with allowance for tolerance

**Erection Considerations:**

- Connections can be completed by follow-up crew
- Access for welding may require ladders or scaffold
- Spacer may be required to make weld

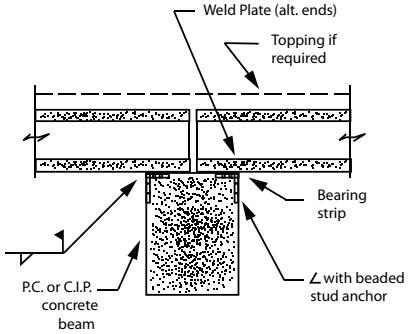


Fig. 5.3.12

Fig. (3.17f) Connections

**Design Considerations:**

- Can transfer diaphragm shear
- Tortional and lateral beam restraint can be provided
- Will develop volume change restraint forces that must be considered in design of connection

**Fabrication Considerations:**

- Slab manufacturing system must allow bottom weld inserts
- Beam and slab weld anchors must align with allowances for tolerance

**Erection Considerations:**

- Connections can be completed by follow-up crew
- Access for welding may require ladders or scaffold
- Spacer may be required to make weld

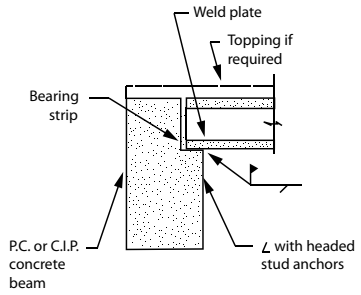


Fig. 5.3.13

Fig. (3.17g) Connections