

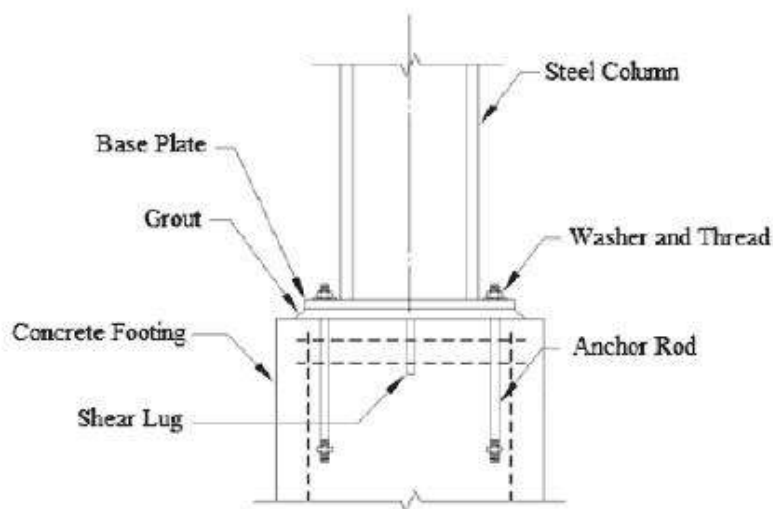
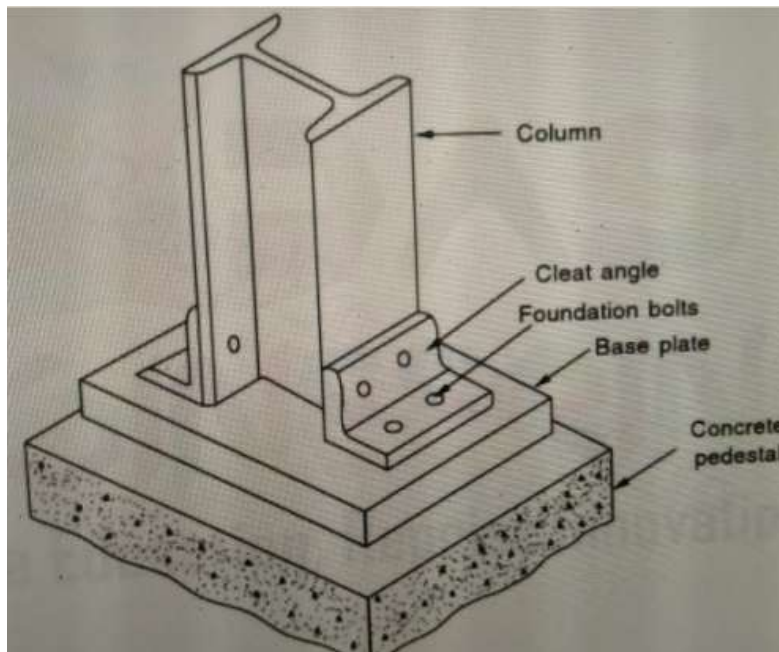


## Chapter – 2 – Column and Column Bases

कॉलम बेस संरचनात्मक तत्व हैं जिनका उपयोग स्टील संरचनाओं के डिजाइन में कॉलम लोड को फुटिंग्स में स्थानांतरित करने के लिए किया जाता है।

### स्तंभ आधारों के प्रकार

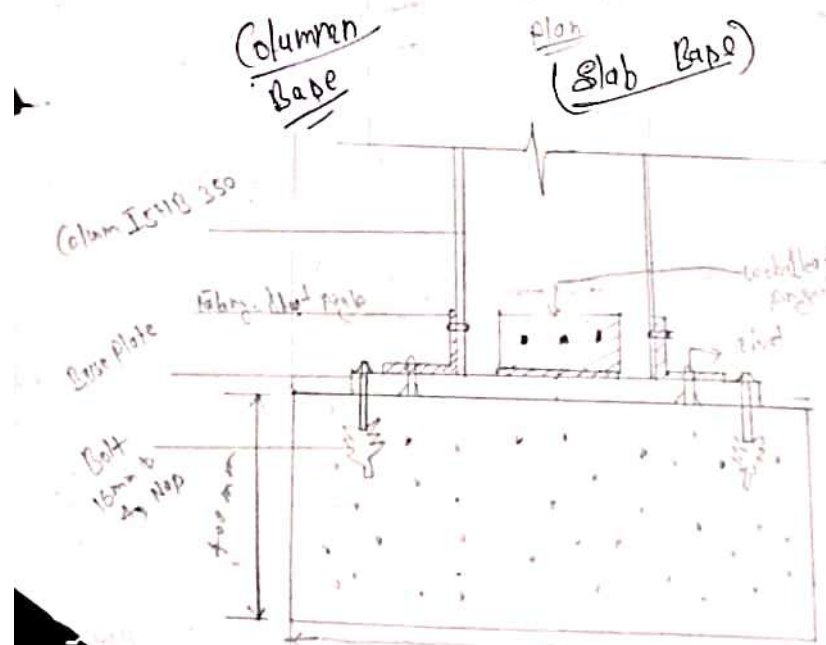
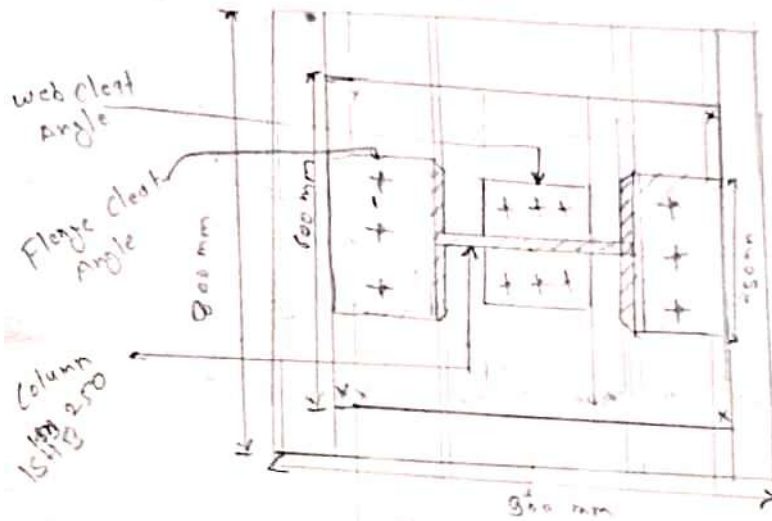
1. स्लैब बेस (Slab Base)
2. गुसेट आधार (Gusset Base)
3. Grillage Base



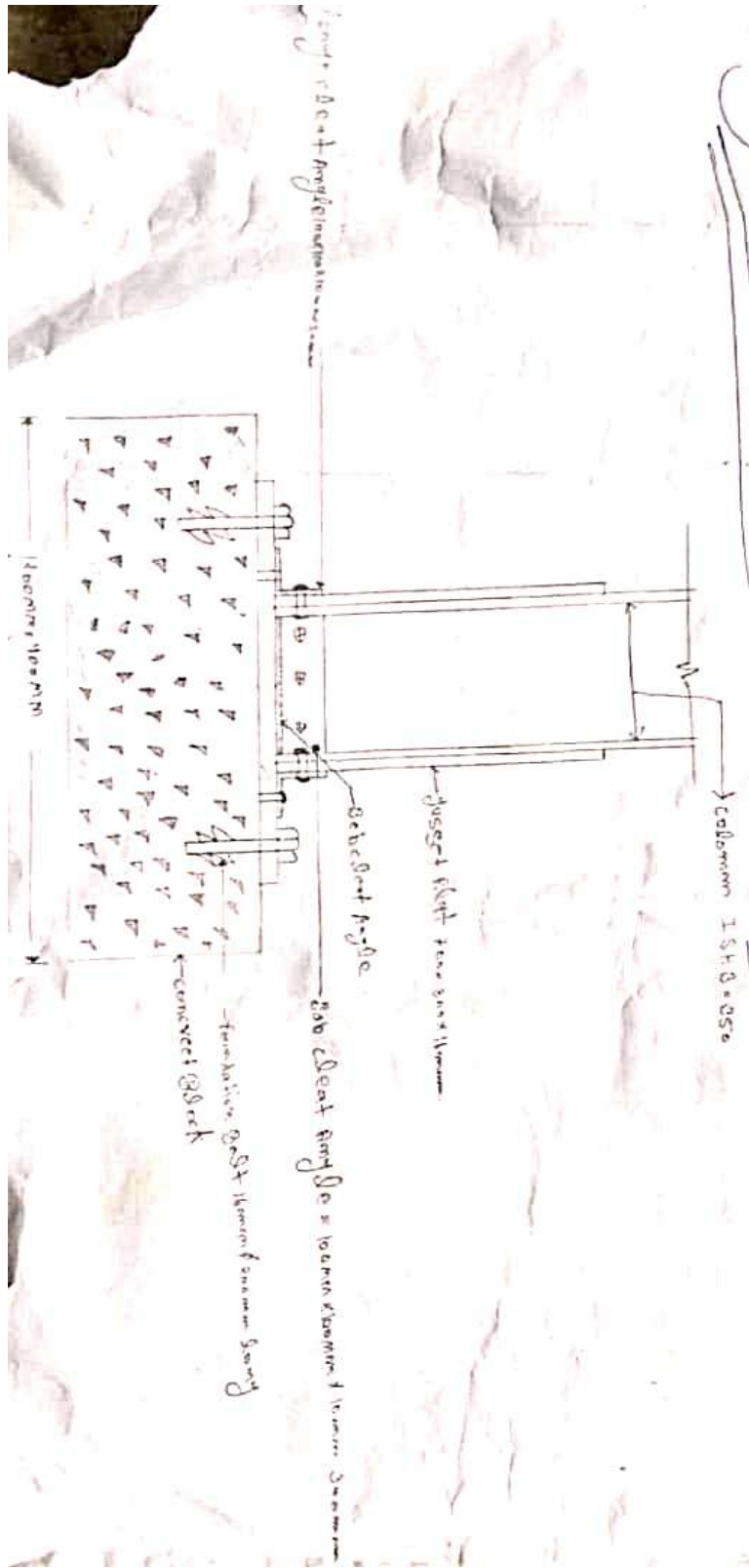


## Column Base without Gusset Plate

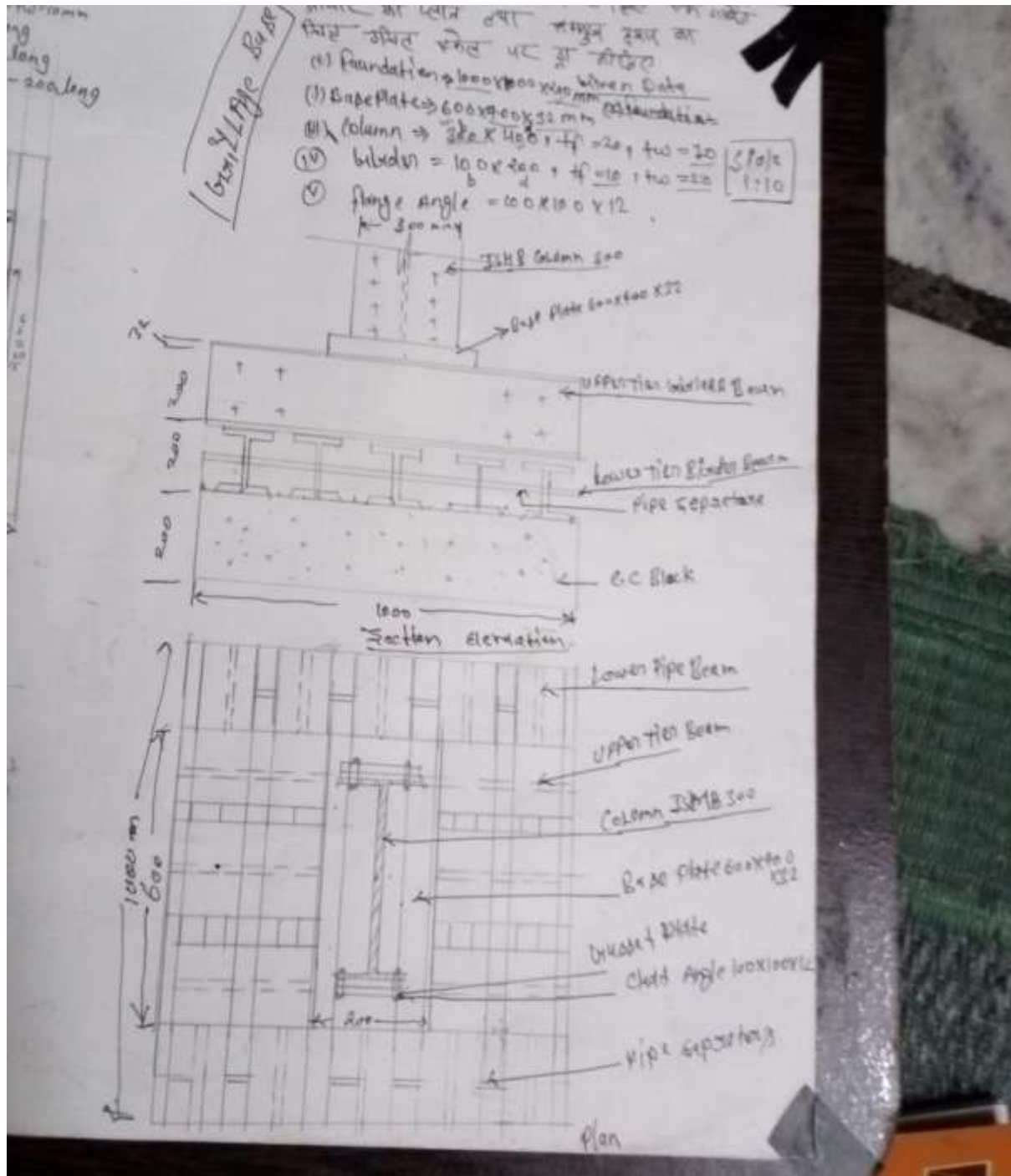
- High Plate  $\frac{1}{2}$
- (i) Conc. Block =  $900\text{ mm} \times 800\text{ mm} \times 400\text{ mm}$
  - (ii) Base Plate =  $700\text{ mm} \times 600\text{ mm} \times 32\text{ mm}$
  - (iii) Column =  $350\text{ mm} \times 350\text{ mm}$  +  $15\text{ mm}$ ,  $t_w = 10\text{ mm}$
  - (iv) Flange cleat angle =  $100 \times 100 \times 10 - 250\text{ long}$
  - (v) Web cleat Angle =  $100 \times 100 \times 10 - 300\text{ long}$
  - (vi) Foundation Bolt = 4 Nos;  $16\text{ mm } \phi - 200\text{ long}$
  - (vii) Rivet =  $14\text{ mm } \phi$



## Column Base with Gusset Plate



## Grillage Base



### Chapter-3

### Beam to Beam and Beam to Column connection