CLAIMS

1. A joint connection structure of a building framework comprising:

a column assembly including a column and a pair of gusset plates connected to the column on opposite sides of the column and extending laterally outward from the column; and

a full-length beam assembly including a full-length beam having upper and lower flanges and an end portion received between the gusset plates, and a connecting member operatively attached by welding to at least one of said flanges of the full-length beam, the connecting member being bolted to at least one of the gusset plates of the column assembly to connect the full-length beam assembly to the column assembly.

2. The joint connection structure of claim 1 wherein the connecting member comprises a first connecting member, the structure further comprising a second connecting member welded to at least one of said flanges of the full-length beam, the second connecting member being bolted to the column assembly to connect the full-length beam assembly to the column assembly.

3. The joint connection structure of claim 2 wherein the second connecting member is welded to a different flange of the full-length beam than the first connecting member, and wherein the joint connection structure further comprises a third connecting member welded to the same flange of the full-length beam as the second connecting member.

4. The joint connection structure of claim 2 wherein the first connecting member is welded to the upper flange of the full-length beam and the second connecting member is welded to the lower flange of the full-length beam, the first connecting member comprising a cover plate and the second connecting member comprising an angle iron.

5. The joint connection structure of claim 1 further comprising bolt holes associated with at least one of the gusset plates and bolt holes associated with the connecting member.

6. The joint connection structure of claim 5 wherein at least some of the bolt holes associated with at least one of the gusset plates are slotted in a direction generally perpendicular

to a longitudinal axis of the full-length beam such that a first dimension of each of said at least some bolt holes extending generally perpendicular to the longitudinal axis of the full-length beam is greater than a second dimension of each of said at least some of bolt holes extending parallel to the longitudinal axis of the full-length beam.

7. The joint connection structure of claim 6 wherein the first dimension also extends parallel to a longitudinal axis of the column.

8. The joint connection structure of claim 6 wherein the second dimension also extends perpendicular to a longitudinal axis of the column.

9. The joint connection structure of claim 5 wherein at least some of the bolt holes associated with the full-length beam are slotted in a direction generally perpendicular to a longitudinal axis of the full-length beam such that a first dimension of each of said at least some bolt holes extending generally perpendicular to the longitudinal axis of the full-length beam is greater than a second dimension of each of said at least some of bolt holes extending parallel to the longitudinal axis of the full-length beam.

10. The joint connection structure of claim 9 wherein the first dimension also extends parallel to a longitudinal axis of the column.

11. The joint connection structure of claim 9 wherein the first dimension also extends perpendicular to a longitudinal axis of the column.

12. The joint connection structure of claim 1 wherein the structure further comprises a connecting member welded to an outer surface of one of the gusset plates in said pair of gusset plates, wherein the connecting member welded to at least one of said flanges of the full-length beam is bolted to the connecting member welded to the outer surface of said one of the gusset plates in said pair of gusset plates.

13. The joint connection structure of claim 12 further comprising a connecting member welded to an outer surface of the other of the gusset plates in said pair of gusset plates, wherein the connecting member welded to at least one of said flanges of the full-length beam is bolted to the connecting member welded to the other of the gusset plates in said pair of gusset plates.

14. The joint connection structure of claim 12 wherein the connecting member welded to at least one of said flanges of the full-length beam comprises a cover plate, and the connecting members welded to the outer surfaces of the gusset plates comprise angle irons.

15. A prefabricated column assembly comprising:

a column;

a pair of gusset plates connected to the column on opposite sides of the column and extending laterally outward from the column;

a connecting member welded to an outer surface of at least one of the gusset plates; and

bolt holes associated with the gusset plates and connecting member for receiving bolts to connect the prefabricated column assembly to a prefabricated beam assembly generally between said pair of gusset plates during erection of a building framework.

16. The column assembly of claim 15 wherein the bolt holes associated with the connecting member are slotted in a direction generally transverse to a longitudinal axis of the column and generally orthogonal to the gusset plates such that a dimension of the bolt holes extending in the transverse direction to the longitudinal axis of the column and orthogonal to the gusset plates is greater than a dimension of the bolt holes extending transverse to the longitudinal axis of the column and parallel to the gusset plates.

17. The column assembly of claim 15 wherein the bolt holes associated with the gusset plates are formed in at least one of the pair of gusset plates, the bolt holes being slotted generally along a vertical dimension of said one of the pair of gusset plates such that a dimension of the bolt holes extending generally along the vertical dimension of said one of the pair of

gusset plates is greater than a dimension of the bolt holes extending parallel to a horizontal dimension of said one of the pair of gusset plates.

18. The column assembly of claim 15 wherein the connecting member comprises an angle iron having a vertical first leg welded to the outer surface of said at least one of the gusset plates at an upper portion of the gusset plate, and a horizontal second leg projecting transversely from the vertical first leg and laterally away from said at least one of the gusset plates and away from the full-length beam, the horizontal second leg having an upper surface disposed above a horizontal upper surface of said at least one of the gusset plates.

19. A prefabricated full-length beam assembly comprising:

a full-length beam including top and bottom flanges; and

slotted bolt holes associated with at least one of the top and bottom flanges of the full-length beam for receiving bolts positioned to connect the prefabricated full-length beam assembly to gusset plates of a prefabricated column assembly during erection of a building framework, the slotted bolt holes being slotted generally perpendicular to a longitudinal axis of the full-length beam such that a dimension of each bolt hole extending generally perpendicular to the longitudinal axis of the full-length beam is greater than a dimension of each bolt hole extending parallel to the longitudinal axis of the full-length beam, the prefabricated full-length beam assembly being free of connection to a column prior to erection of the building framework.

20. The full-length beam assembly of claim 19 further comprising a connecting member welded to at least one of the top and bottom flanges of the full-length beam, the connecting member defining the slotted bolt holes.

21. The full-length beam assembly of claim 20 wherein the connecting member comprises a cover plate welded to the top flange of the full-length beam.

22. The full-length beam assembly of claim 21 wherein the cover plate has a slot extending along a majority of a length of the cover plate and generally parallel to a length of the full-length beam.

23. The full-length beam assembly of claim 22 wherein the slot opens at an end of the cover plate.

24. The full-length beam assembly of claim 20 wherein the connecting member comprises an angle iron welded to the bottom flange of the full-length beam.

25. A framework comprising a plurality of joint connection structures as set forth in claim 1.

26. The joint connection structure of claim 1 further comprising bolts connecting the gusset plates to the column.