CLAIMS:

1. A cable tray comprising:

a pair of generally parallel spaced-apart side rails, each side rail defining a plurality of openings;

rungs extending between the rails at intervals spaced along the rails, wherein each rung comprises at least two side walls, wherein each rung has opposite open ends generally aligned with respective openings in the side rails, wherein end portions of each rung define a transverse opening; and

a plurality of snap plug fasteners fastening the rungs to the side rails, each snap plug fastener including a main body abutting an outboard surface of one of the side rails, and a projection extending through one of the openings in the side rail and into one of the open ends of one of the rungs, wherein the projection includes a barb received in one of the transverse openings in the rung.

2. The cable tray of claim 1, wherein the rails and rungs are constructed from fiberglass.

3. The cable tray of claim 1, wherein the plurality of snap plug fasteners are constructed from a polymer.

4. The cable tray of claim 3, wherein a hardness of the snap plug fasteners is greater than a hardness of the rails and rungs.

5. The cable tray of claim 1, wherein the projection and barb comprise a first projection and first barb, respectively, wherein the snap plug includes a second projection having a second barb disposed thereon, the second barb being received in one of the transverse openings in the rung, the transverse opening receiving the first barb being formed in a separate side wall from the transverse opening receiving the second barb.

6. The cable tray of claim 1, wherein the main body of the snap plug fastener defines an opening in a central portion thereof.

7. The cable tray of claim 1, wherein each of the projections of the snap plug fasteners has an outer surface configured to engage the cable tray rung, and an inner surface disposed toward an interior opening of the snap plug fastener, wherein the outer surface of the projection is substantially planar.

8. The cable tray of claim 7, wherein the inner surface of each of the projections tapers inward from a first end of the projection to a second end of the projection.

9. The cable tray of claim 1, wherein each of the barbs comprises a ramp surface and an end surface, wherein the ramp surface and the end surface are substantially planar.

10. The cable tray of claim 9, wherein the ramp surface of each of the barbs is angled with respect to a vertical axis of the snap plug fastener.

11. The cable tray of claim 10, wherein the angled ramp surface is serrated.

12. A snap plug fastener for coupling a cable tray rung to a cable tray rail, the fastener comprising:

a main body defining a central opening; and

a plurality of projections extending outward from the main body, each projection including a barb disposed on an end of the projection, the projections being configured to extend through aligned openings in the cable tray rail and rung, and each of the barbs being configured to be received in a transverse opening in the rung to secure the rung to the rail.

13. The snap plug fastener of claim 12, wherein the main body comprises a plate.

14. The snap plug fastener of claim 12, wherein each of the projections have an outer surface configured to engage the cable tray rung, and an inner surface facing a central axis of the snap plug fastener, wherein the outer surface extends orthogonally from the main body.

15. The snap plug fastener of claim 14, wherein the inner surface of each of the projections tapers inward toward the central axis of the as the projection extends away from the main body.

16. The snap plug fastener of claim 12, wherein each of the barbs comprises a ramp surface and an end surface, wherein the ramp surface and the end surface are substantially planar.

17. The snap plug fastener of claim 16, wherein the ramp surface of each of the barbs is angled with respect to a vertical axis of the snap plug fastener.

18. The snap plug fastener of claim 17, wherein the angled ramp surface is serrated.

19. A method of coupling a cable tray rung to a cable tray rail, the method comprising;

aligning an opening defined by a vertical web of the cable tray rail with an open end of the cable tray rung, wherein the cable tray rung has an end portion defining a plurality of transverse openings;

inserting a snap plug fastener through the vertical web opening and into the open end of the cable tray rail, such that barbs disposed on ends of projections of the fastener are received in the transverse openings in the cable tray rung; and

inserting a rod into the snap plug fastener such that the rod engages inward-facing surfaces of the projections to force the barbs outward locking the barbs in the transverse openings.

20. The method of claim 19, wherein the method further comprises inserting a rivet through an opening defined in a lower flange of the cable tray rail and a transverse opening defined by a bottom wall of the cable tray rung.