CLAIMS

What is claimed is:

1. A modular stairwell and elevator shaft system, comprising:

a first side panel having an elevator door and an elevator door frame, wherein the first side panel is operable to span vertically between a first pair of adjacent corbel beams, and wherein the first side panel includes stairwell and handrail support components;

a second side panel, parallel to the first side panel, and having a stairwell door and a stairwell door frame, wherein the second side panel is operable to span vertically between a second pair of adjacent corbel beams, and wherein the second side panel includes stairwell and handrail support components;

an end panel, orthogonal to the first and second side panels, and operable to span vertically between a third pair of adjacent corbel beams;

a first elevator shaft panel, parallel to the end panel, and including first elevator components;

a second elevator shaft panel, parallel to the first elevator shaft panel, and including second elevator components;

one or more stairwell treads configured to attach to the stairwell and handrail support components of at least one of the first side panel and the second side panel;

one or more stairwell handrails configured to attach to the stairwell and handrail support components of at least one of the first side panel and the second side panel; and

one or more stairwell landings configured to attach to the stairwell and handrail support components of at least one of the first side panel and the second side panel.

2. The modular stairwell and elevator shaft system of claim 1, wherein the first side panel, the second side panel, and the end panel are a first height, and wherein the first elevator shaft panel and the second elevator shaft panel are each a second height that is greater than the first height.

3. The modular stairwell and elevator shaft system of claim 2, wherein the first height spans a portion of one story and the second height spans a portion of two stories.

4. The modular stairwell and elevator shaft system of claim 1, wherein the stairwell and handrail support components are installed on the first side panel, the second side panel, and the end panel prior to installation of the first side panel, the second side panel, and the end panel in a building.

5. The modular stairwell and elevator shaft system of claim 1, wherein the first elevator shaft panel and the second elevator shaft panel are operable to attach to respective corbel beam clips attached to corresponding corbel beams, and wherein the first elevator shaft panel and the second elevator shaft panel each include multiple light gauge members installed together to form one or more vertical framing members and one or more horizontal framing members.

6. The modular stairwell and elevator shaft system of claim 1, wherein the elevator door frame and the elevator door are installed in the first side panel prior to installation of the first side panel in a building.

7. The modular stairwell and elevator shaft system of claim 1, wherein the stairwell door frame and the stairwell door are installed in the second side panel prior to installation of the second side panel in a building.

8. The modular stairwell and elevator shaft system of claim 1, wherein the one or more stairwell treads, the one or more stairwell handrails, and the one or more stairwell landings are installed at a building construction site.

9. The modular stairwell and elevator shaft system of claim 1, wherein the first elevator components include one or more counterweight rails, one or more counterweight brackets, and one or more elevator rail brackets.

10. The modular stairwell and elevator shaft system of claim 1, wherein the second elevator components include one or more elevator rail brackets.

11. The modular stairwell and elevator shaft system of claim 1, further comprising:

one or more elevator rails, wherein the one or more elevator rails are installed, at a building construction site, on respective elevator rail brackets that were installed on the first elevator shaft panel and the second elevator shaft panel prior to installation of the first elevator shaft panel and the second elevator shaft panel in a building at the building construction site.

12. A method to make a modular stairwell and elevator shaft system, the method comprising:

forming a first side panel having an elevator door and an elevator door frame, wherein the first side panel is configured to span vertically between a first pair of adjacent corbel beams;

installing first stairwell and handrail support components on the first side panel;

forming a second side panel, parallel to the first side panel, and having a stairwell door and a stairwell door frame, wherein the second side panel is configured to span vertically between a second pair of adjacent corbel beams;

installing second stairwell and handrail support components on the second side panel;

forming an end panel, orthogonal to the first and second side panels, and configured to span vertically between a third pair of adjacent corbel beams;

forming a first elevator shaft panel parallel to the end panel;

installing first elevator components on the first elevator shaft panel;

forming a second elevator shaft panel parallel to the first elevator shaft panel; and

installing second elevator components on the second elevator shaft panel, wherein the forming and installing are performed prior to the first side panel, the second side panel, the end panel, the first elevator shaft panel, and the second elevator shaft panel being installed in a building.

13. The method of claim 12, wherein the first side panel, the second side panel, and the end panel are each formed to have a first height, and wherein the first elevator shaft panel and the second elevator shaft panel are each formed to have a second height that is greater than the first height.

14. The method of claim 13, wherein the first height spans a portion of one story and the second height spans a portion of two stories.

15. The method of claim 12, wherein the first elevator shaft panel and the second elevator shaft panel are configured to attach to respective corbel beam clips attached to corresponding corbel beams.

16. The method of claim 12, wherein the first elevator components include one or more counterweight rails, one or more counterweight brackets, and one or more elevator rail brackets.

17. The method of claim 12, wherein the second elevator components include one or more elevator rail brackets.

18. A method to install a modular stairwell and elevator shaft system, the method comprising:

installing, in a building, a first side panel to span vertically between a first pair of adjacent corbel beams, wherein the first side panel includes an elevator door, an elevator door frame, and stairwell and handrail support components;

installing, in the building, a second side panel to span vertically between a second pair of adjacent corbel beams, wherein the second side panel includes a stairwell door frame , a stairwell door, and stairwell and handrail support components;

installing, in the building, an end panel configured to span vertically between a third pair of adjacent corbel beams;

installing, in the building, a first elevator shaft panel having first elevator components that were attached to the first elevator shaft panel prior to the first elevator shaft panel being installed in the building, wherein the first elevator shaft panel is attached to one or more corbel beams via corresponding corbel beam clips;

installing, in the building, a second elevator shaft panel having second elevator components that were attached to the second elevator shaft panel prior to the second elevator shaft panel being installed in the building, wherein the second elevator shaft panel is attached to one or more corbel beams via corresponding corbel beam clips;

attaching one or more stairwell treads to the stairwell and handrail support components of at least one of the first side panel and the second side panel;

attaching one or more stairwell handrails to the stairwell and handrail support components of at least one of the first side panel and the second side panel; and

attaching one or more stairwell landings to the stairwell and handrail support components of at least one of the first side panel and the second side panel.

19. The method of claim 18, further comprising:

installing, in the building, one or more elevator rails on respective elevator rail brackets on the first elevator shaft panel and the second elevator shaft panel.

20. The method of claim 18, wherein the first elevator components include one or more counterweight rails, one or more counterweight brackets, and one or more elevator rail brackets, and wherein the second elevator components include one or more elevator rail brackets.