Claims:

1. A method of assembling a free-standing cable tray support structure that supports cables above an array of electronic equipment racks disposed on a floor of a data center, comprising the steps of:

providing a plurality of vertical support posts that are longer than the height of the electronic equipment racks;

providing a plurality of horizontal support members having lengths that space the plurality of vertical support posts in spaces between the electronic equipment racks of the array when the vertical support posts are coupled to the horizontal support members;

assembling within the data center the vertical support posts and horizontal support members into a completed, free-standing cable tray support structure by:

coupling together top ends of the plurality of vertical support posts with the plurality of horizontal support members to form a free-standing cable tray support structure supported only by bottom ends of the vertical support posts engaging the floor;

positioning the bottom ends of the vertical support posts of the free-standing cable tray support structure at a location on the floor of the data center such that the electronic equipment racks are positioned in spaces between the vertical support posts, and

anchoring the bottom ends of the vertical support posts to the floor of the data center,

wherein the completed free-standing cable tray support structure is mechanically independent from the array of electronic equipment racks which directly engage and are supported solely by the floor of the data center.

2. The method of assembling a free-standing cable tray support structure defined in claim 1, wherein the electronic equipment racks are arranged between adjacent vertical support posts after the cable tray support structure has been assembled.

3. The method of assembling a free-standing cable tray support structure defined in claim 1, wherein the electronic equipment racks are arranged in an array on the floor of the data center before the cable tray support structure is assembled.

4. The method of assembling a free-standing cable tray support structure defined in claim 1, wherein the data center includes a ventilation system and the free-standing support structure is mechanically independent from the ventilation system.

5. A method of assembling a free-standing cable tray support structure that supports cables above an array of electronic equipment racks disposed on a floor of a data center, comprising the steps of:

providing a plurality of vertical support posts that are longer than the height of the electronic equipment racks;

providing a plurality of horizontal support members having lengths that space the plurality of vertical support posts between the electronic equipment racks of the array when the vertical support posts are coupled thereto;

assembling at the data center the vertical support posts and the horizontal support members by:

connecting the top ends of the vertical support posts with the horizontal support members to form a free-standing cable tray support structure supported only by the bottom ends of the vertical support posts engaging a floor;

positioning the bottom ends of the vertical support posts of the free-standing cable tray support structure at a desired location on a floor of a data center such that the electronic equipment racks are positioned in spaces between the vertical support posts;

securing the bottom ends of the vertical support posts to the floor of the data center to form a free-standing cable tray support structure,

wherein the electronic equipment racks engage the floor of the data center and are not mechanically supported by the completed free-standing cable tray support structure.

6. The method of assembling a free-standing cable tray support structure defined in claim 5, wherein the electronic equipment racks are arranged on the floor of the data center between adjacent vertical support posts after the cable tray support structure has been assembled.

7. The method of assembling a free-standing cable tray support structure defined in claim 5, wherein the electronic equipment racks are arranged in an array on the floor of the data center before the cable tray support structure is assembled.

8. The method of assembling a free-standing cable tray support structure defined in claim 5, wherein the data center includes a ventilation system and the free-standing support structure is mechanically independent from the ventilation system.