What is claimed:

1. A method for molding, via compression molding, a rib-and-sheet part, the method comprising:

placing, in a first mold cavity, a preform charge having a first shape, wherein the preform charge is an assemblage of a plurality of continuous-fiber preforms that are adhered to one another, each preform comprising a bundle of unidirectionally aligned fibers and thermoplastic polymer resin;

compression molding, in a first mold, the preform charge by subjecting the preform charge to heat that is sufficient to melt the thermoplastic polymer resin and pressure that is sufficient to fully consolidate the preform charge into a rib having the first shape;

compression molding, in the first mold or in a second mold, a first material selected from the group consisting of a preformed sheet of prepreg, plural plies of prepreg, and chopped fibers, wherein heat and pressure applied via the compression molding is sufficient to consolidate the first material with the rib; and

cooling the consolidated first material and the rib, thereby forming the rib-and-sheet part.

2. The method of claim 1, wherein the first shape comprises a loop.

3. The method of claim 1 comprising:

forming the plurality of continuous-fiber preforms;

organizing the continuous-fiber preforms into the assemblage having the first shape, wherein the assemblage consists of multiple layers, each layer comprising at least one of the preforms, and wherein at least some of the layers have the first shape.

4. The method of claim1, wherein the rib is discontinuous.

5. The method of claim 3, wherein at least some of the layers having the first shape have a gap therein, and when the layers having the gap are directly adjacent one another in overlying relation, organizing the continuous-fiber preforms further comprises offsetting the gaps in the directly adjacent layers.

6. The method of claim 3, wherein for at least some of the layers having the first shape, the first shape is a loop shape formed from two "L"-shaped continuous-fiber preforms.

7. The method of claim 3 comprising tacking together the assemblage of continuous-fiber preforms, thereby forming the preform charge having the first shape.

8. The method of claim 3, wherein organizing the continuous-fiber preforms into an assemblage further comprises:

organizing the continuous-fiber preforms into an assemblage in a fixture physically adapted to organize them into the first shape;

tacking together the assemblage of continuous-fiber preforms, thereby forming a preform charge having the first shape; and

removing the preform charge from the fixture and placing the preform charge in the first mold.

9. The method of claim 1, wherein compression molding, in a first mold, the preform charge comprises:

cooling the fully consolidated preform charge; and

placing the rib in the second mold.

10. The method of claim 9, wherein the second mold is configured to dispose at least a portion of the rib at a perimeter of the rib-and-sheet part.

11. The method of any of claims 1-8, or 10, wherein the first material and the preform charge are compression molded in the first mold, and at the same time.

12. The method of claim 1, wherein the first shape comprises a perimeter portion and an internal portion, the perimeter portion defining a loop, and the internal portion comprising one or more members disposed within the perimeter portion and intersecting the perimeter portion.