CLAIMS:

1. A refrigerated cargo container comprising:

a cargo container; and

a refrigeration unit including a support frame formed from at least one layer of composite material and at least one layer of insulative foam material, the support frame supportive of one or more components of the refrigeration unit and insulative of a cargo portion of the cargo container.

2. The refrigerated cargo container of Claim 1, wherein the support frame includes two layers of composite material with the at least one layer of insulative foam material disposed therebetween.

3. The refrigerated cargo container of Claim 1, the support frame further comprising a metal stiffener member.

4. The refrigerated cargo container of Claim 3, wherein the stiffener member is formed from an aluminum material.

5. The refrigerated cargo container of Claim 1, wherein the at least one layer of composite material is a fiber reinforced polymer matrix composite material.

6. The refrigerated cargo container of Claim 1, wherein the support frame is formed by one of vacuum infusion, resin transfer molding or lite resin transfer molding.

7. The refrigerated cargo container unit of Claim 1, wherein the layer of composite material is formed via compression molding using sheet molding compound.

8. The refrigerated cargo container of Claim 1, wherein the support frame is disposed at a first end of the refrigerated cargo container.

9. The refrigerated container of Claim 1, wherein the support frame includes at least one recessed pocket.

10. The refrigerated cargo container of Claim 8, wherein the one or more components of the refrigeration unit are disposed at the at least one recessed pocket.

11. A support frame for a refrigeration unit of a refrigerated cargo container comprising:

one or more layers of composite material; and

at least one layer of thermally insulative material secured thereto, the support frame supportive of one or more components of the refrigeration unit and thermally insulative of a cargo portion of the cargo container.

12. The support frame of Claim 11, wherein the support frame includes two layers of composite material with the at least one layer of insulative foam material disposed therebetween.

13. The support frame of Claim 11, wherein the support frame is formed by one of vacuum infusion, resin transfer molding or lite resin transfer molding.

14. The support frame of Claim 11, further comprising a metal stiffener member.

15. The support frame of Claim 14, wherein the stiffener member is formed from an aluminum material.

16. The support frame of Claim 11, wherein the at least one layer of composite material is a fiber reinforced polymer matrix composite material.

17. The support frame of Claim 11, wherein the layer of composite material is formed via compression molding using sheet molding compound.

18. The support frame of Claim 11, wherein the support frame includes at least one recessed pocket.

19. The support frame of Claim 18, wherein the at least one recessed pocket is receptive of one or more components of the refrigeration unit.

CLAIMS:

1. A support frame for a refrigeration unit of a refrigerated cargo container comprising:

two layers of composite material;

a metal stiffener member disposed between the two layers of composite material;

at least one layer of thermally insulative material secured thereto, the support frame including at least one recessed pocket receptive of and supportive of one or more components of the refrigeration unit and thermally insulative of a cargo portion of the cargo container.

2. The support frame of Claim 1, wherein the support frame includes two layers of composite material with the at least one layer of insulative foam material disposed therebetween.

3. The support frame as claimed in Claim 1 or Claim 2, wherein the support frame is formed by one of vacuum infusion, resin transfer molding or lite resin transfer molding.

4. The support frame as claimed in Claim 1 or Claim 2, wherein the layer of composite material is formed via compression molding using sheet molding compound.

5. The support frame as claimed in Claim 1, wherein the stiffener member is formed from an aluminum material.

6. The support frame as claimed in any one of the preceding Claims, wherein at least one layer of composite material is a fiber reinforced polymer matrix composite material.

7. A refrigerated cargo container comprising:

a cargo container; and

a refrigeration unit including the support frame as claimed in any one of the preceding claims, the support frame being formed from at least one layer of composite material and at least one layer of insulative foam material.

8. The refrigerated cargo container as claimed in Claim 7, wherein the support frame is disposed at a first end of the refrigerated cargo container.