CLAIMS

1. A sealing assembly for a door, the door including a door assembly comprising:
a top frame, a bottom frame and a pair of side frames mountable to a wall;
one or more panels adapted to be connected to the pair of side frames via a plurality of hinges, the one or more panels moveable between an open position, in which a longitudinal plane of the one or more panels are non-parallel to the wall, and a closed position, in which the longitudinal plane of the one or more panels are parallel to the wall;
a plurality of seals located around the one or more panels and adaptively connected to the top frame and the one or more panels in the closed position;
a plurality of gaskets mountable on the perimeter of the one or more panels;
one or more enclosed regions defined between the plurality of seals to inhibit sound transmission; and
a locking mechanism located at a distal edge of the one or more panels, away from the plurality of hinges, to be engaged in the closed position to keep the plurality of gaskets under a compressed state,
wherein the top frame and the one or more panels have five seals, wherein a first seal is attached to the one or more panels through a bracket and impinged by an exterior wall of the top frame when in the closed position, and a second seal is connected to the exterior wall of the top frame and impinged by an edge of the one or more panels when in the closed position, and wherein a first enclosed region is defined between the first and second seal; a third seal housed within a recess of the exterior wall of the top frame and impinged by a protrusion of the one or more panels when in the closed position wherein a second enclosed region is defined between the second and third seal; a fourth seal connected to the exterior wall of the top frame and impinged by the one or more panels when in the closed position wherein a third enclosed region is defined between the third and fourth seal; a fifth seal attached to the exterior wall of the top frame and abuts the fourth seal when in the closed position.

2. The sealing assembly of claim 1, further comprising a first astragal mounted on a front side of a plurality of the one or more panels and a second astragal mounted on a rear side of the one or more panels, wherein the first and second astragals are opposite to one another when the panels are in the closed position.

3. The sealing assembly of claim 2, wherein the first and second astragals house a seal in their respective recesses.

4. The sealing assembly of claim 1, wherein the locking mechanism is a compression lock mechanism.

5. The sealing assembly of any one of the preceding claims, wherein the bottom frame has five seals.

6. The sealing assembly of any one of the preceding claims, wherein the pair of side frames has five seals.

7. The sealing assembly of any one of the preceding claims, wherein the distal edge of the one or more panels has four seals.

8. The sealing assembly of any one of the preceding claims, wherein the seals have a bulb section and a teardrop section.

9. The sealing assembly of claim 5, wherein a first seal is attached to the one or more panels through a bracket and impinged by an exterior wall of the bottom frame when in the closed position, and a second seal is connected to the exterior wall of the bottom frame and impinged by an edge of the one or more panels when in the closed position.

10. The sealing assembly of claim 9, wherein a first enclosed region is defined between the first and second seal.

11. The sealing assembly of claim 10, further comprising a third seal housed within a recess of the exterior wall of the bottom frame and impinged by a protrusion of the one or more panels when in the closed position.

12. The sealing assembly of claim 11, wherein a second enclosed region is defined between the second and third seal.

13. The sealing assembly of claim 12, further comprising a fourth seal connected to the exterior wall of the bottom frame and impinged by the one or more panels when in the closed position.

14. The sealing assembly of claim 13, wherein a third enclosed region is defined between the third and fourth seal.

15. The sealing assembly of claim 14, further comprising a fifth seal attached to the exterior wall of the top frame and abuts the fourth seal when in the closed position.

16. The sealing assembly of claim 6, wherein a first seal is mounted on an exterior wall of the pair of side frames and impinged by the one or more panels when in the closed position, and a second seal is mounted to a first flange on the exterior wall of the pair of side frames, away from the first seal and impinged by a section of the one or more panels when in the closed position.

17. The sealing assembly of claim 16, wherein a first enclosed region is defined between the first and second seal.

18. The sealing assembly of claim 17, further comprising a third seal housed within a recess formed by the flange and the exterior wall of the pair of side frames.

19. The sealing assembly of claim 18, wherein a second enclosed region is defined between the second and third seal.

20. The sealing assembly of claim 19, further comprising a fourth seal mounted

onto a second flange of the exterior wall of the pair of side frames and impinged by the one or more panels when in the closed position.

21. The sealing assembly of claim 20, wherein a third enclosed region is defined between the third and fourth seal.

22. The sealing assembly of claim 21, further comprising a fifth seal attached to the exterior wall of the pair of side frames and abuts the fourth seal when in the closed position.

23. The sealing assembly of claim 7, further comprising a pair of seals housed within a recess formed by a first panel, the pair of seals abutting a pair of corresponding edges on a second panel when in the closed position.

24. The sealing assembly of claim 1 wherein the plurality of seals are adaptively connected to the bottom frame and the one or more panels in the closed position.

25. The sealing assembly of claim 1, wherein the plurality of seals is adaptively connected to the pair of side frames and the one or more panels in the closed position.

26. A method of installing a sealing assembly for a door according to claim 1, comprising the steps of:
securing the top frame, bottom frame and the pair of side frames to the wall;
mounting the one or more panels to the pair of side frames, such that the one or more panels are moveable between an open position in which a longitudinal plane of the one or more panels are non-parallel to the wall, and a closed position, in which the longitudinal plane of the one or more panels are parallel to the wall;
securing the plurality of seals around the one or more panels, the plurality of seals being operable to contact with the top frame and the one or more panels in the closed position, the plurality of seals being arranged such that an air passage formed between the top frame and the one or more panels is enclosed in the closed position, wherein the air passage extends across an entire mating region between the top frame and the one or more panels, wherein one or more enclosed regions are defined between the plurality of seals to inhibit sound transmission; and
fitting a locking mechanism at a distal edge of the one or more panels away from the side frame, such that the locking mechanism is adapted to retain the one or more panels in the closed position to keep the plurality of seals under a compressed state.