

Debris Chute - Claims Defining the invention (amended under Article 19)

Claim 1

A gravity type debris chute to be used with a universal scaffolding system formed by hanging a plurality of corner panels on corners of a structure having horizontal elements, a plurality of side panels and a door panel on the structure with horizontal structural elements so as to form a passage for debris to pass through, wherein each of the said corner panels is folded in the middle so as to form two symmetrical sides, the top of each of said corner panels folded to form a lip or a u fold so as to hang from a structural member, each of said side panels folded at the top to form a u fold or a lip capable of hanging from a horizontal structural member, the said door panel folded at the top end to form a u fold or a lip for hanging from a horizontal structural element in such a way that any of the door panels capable of opening outwardly and all of the four side panels capable of being opened simultaneously, the said door panel further comprising a striker and a stiffener to prevent the door panel falling into the said passage through which debris passes through.

2. A debris chute as defined in claim 1 in which the corner plate is made of a single piece of metal plate.

3. A debris chute as defined in claim 2 where in the set of structural elements comprises an existing set of scaffolding members.

4. A debris chute as defined in claim 3 wherein the existing scaffolding members are placed horizontally to form an octagon for hanging four corner plates, three side plate and one door plate to form a debris chute passage with an octagonal cross section to form an enclosed passage or shaft for debris to pass through.

5. A debris chute as defined in claim 4, where a series of eight individual panels make up an octagonal conveyor chute section such that the eight panels are connected to each other to form an enclosed shaft or passage in which individual panels are supported onto a structure such as existing scaffolding or a frame.

6. A debris chute as defined in claim 5, wherein a plurality of corner plates, side plates and door plates are hung from the horizontal members of an existing scaffolding structure and nested above each other to form a passage or shaft for debris to pass through.

7. A debris chute as defined in claim 6, wherein the angle between the two sides of the corner plate is anything from 90 degrees to 120 degrees.

8. A debris chute as defined in claim 7 wherein the middle fold of the corner plate in the corner plate is created in such a way as to prevent any interference with any vertical structural members of an existing scaffolding.

9. A debris chute as defined claim 8 wherein the four corner plates are attached to four corners of a horizontal structure.

10. A debris chute as defined in claim 9, wherein door panels are hung at different heights of a structure, corresponding to different floor levels of a building.

11. A debris chute as defined in claim 10 where the door panels are rotatable or hinged to a horizontal structural member.

12. A debris chute as defined in claim 10 where the door panel is hinged to a bottom horizontal structural member.

13. A debris panel of claim 10 where the door panel is hinged to a top horizontal structural member.

14. A debris chute of claim 10 where the door panel is supported by chains linked to a top horizontal structural member.

15. A debris chute as defined in any one of the above claims where a dust cover is positioned to prevent escape of any dust.

16. A debris chute as defined in any one of the above claims where it includes a warning system to indicate if any of the door panels are open.

17. A debris chute as defined in any one of the above claims, where panels are made of any rigid material such as steel, plastic, aluminum or plywood.