**Comparison of NASA, ASME and DHS Distances in Feet**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **TNT Equiv**  **(lbs)** | **NASA**  **NASA-STD-8719.12**  **H/D 1.1** | | **ASME**  **PCC-2-2018**  **(IME ATD)** | **DHS**  **Bomb Threat** | | |
|  | Structure | Open | IBD | Bldg | Outdoor | Threat |
| ≤ 0.5 | 200 | 236 |  |  |  |  |
| 5 | 200 | 419 | 140 | 70 | 1200 | Pipe bomb |
| 20 | 200 | 529 | 250 | 110 | 1700 | Suicide bomber (vest) |
| 50 | 388 | 601 | 340 | 150 | 1850 | Briefcase/Suitcase |
| 500 | 1250 |  | 680 | 320 | 1500 | Car |
| 1000 | 1250 |  | 850 | 400 | 2400 | SUV/Van |
| 4000 | 1250 |  | 1370 | 640 | 3800 | Small Moving Van/Delivery Truck |
| 10000 | 1250 |  | 1750 | 860 | 5100 | Moving Van/Water Truck |
| 60000 | 1562 |  | 2000 | 1570 | 9300 | Semi-Trailer |

DHS=Department of Homeland Security

1. These capacities are based on the maximum weight of explosive material that could reasonably fit in a container of similar size.

2. Personnel in buildings are provided a high degree of protection from death or serious injury; however, glass breakage and building debris may still cause some injuries. Unstrengthened buildings can be expected to sustain damage that approximates five percent of their replacement cost.

3. If personnel cannot enter a building to seek shelter they must evacuate to the minimum distance recommended by Outdoor Evacuation Distance. These distance is governed by the greater hazard of fragmentation distance, glass breakage or threshold for ear drum rupture.

IME=Institute of Makers of Explosives

ATD=American Table of Distances

American Table of Distances for Storage of Explosive Materials - as Revised and Approved by the Institute of Makers of Explosives – June 1991

ASME PCC-2-2018

GENERAL NOTE: Based on American Table of Distances published by the Institute of Makers of Explosives. Lengths are for inhabited buildings, unbarricaded.