

Tab D to Appendix 1
Annex J

DEBRIS TYPES AND ESTIMATE CALCULATIONS

Tornado debris

Damage from tornadoes is caused by high velocity rotating winds. The severity of the damage depends on the size of the tornado funnel and the length of time the funnel touches the ground. Damage is generally confined to a narrow path extending up to half a mile wide and from a hundred yards to several miles long.

Tornado debris includes damaged and destroyed structures, green waste, and personal property.

Flood debris

Debris from floods is caused by structural inundation and high-velocity water flow. As soon as flood waters recede, people begin to dispose of flood-damaged household items. Mud, sediment, sandbags, and other reinforcing materials also add to the volume of debris needing management, as do materials from demolished and dismantled houses.

Fire debris

While fires leave less debris than other types of disasters, they still generate waste. For example, demolished houses contribute noncombustible debris. Burned out cars and other metal objects, as well as ash and charred wood waste, also must be managed. In addition, large-scale loss of plants serving as ground cover can lead to mud slides, adding debris to the waste stream.

Formulas commonly used to compute debris estimates:

Debris Pile: $\frac{L' \times W' \times H'}{27} = \text{_____ cubic yards}$

Tons to Cubic Yards for Construction and Demolition Debris

Tons x 2 = _____ cubic yards

Tons to Cubic Yards for woody debris

Tons x 4 = _____ cubic yards

Cubic Yards to Tons for Construction and Demolition Debris

$\frac{\text{Cubic Yards}}{2} = \text{_____ T}$

Cubic Yards to Tons for woody debris

$\frac{\text{Cubic Yards}}{4} = \text{_____ T}$

TABLES FOR ROADSIDE DEBRIS			
LENGTH	WIDTH	HEIGHT	VOLUME
10'	10'	4'	30 cy
20'	10'	4'	40 cy
30'	10'	4'	45 cy
40'	10'	4'	60 cy
50'	10'	4'	75 cy

Other useful measurements:

27 cubic feet = 1 cubic yard

Average pace = 2' 6"

Mobile home = 80 cubic yards

House (1800-2000 SF) = approximately 300 cubic yards

Fifteen eight inch diameter trees = 40 cubic yards

Root systems 8-10' in diameter require one flatbed truck to move