

Vehicle-to-Barrier Impact Crush Stiffness Coefficients

g: 32.17 ft/s²

Restitution Coeff., e:

0.00

Initial Energy 125,877.8 ft-lb
Final Energy 0.0 ft-lb
Energy Loss 125,877.8 ft-lb

Striker (Veh 1):

Weight **4000.0** lb
Mass 124.3 lb-s²/ft
Initial Speed **45.00** ft/s
Initial Speed 30.7 mph

Zero Crush Speed **7.00** mph
Crush Width **60.00** in

d₀ 51.2 sqrt(lb)

d₁ 100.9 sqrt(lb)/ft

d₁ 8.4 sqrt(lb)/in

ΔV -45.0 ft/s
Final Speed 0.0 ft/s
Final Speed 0.0 mph

d₀ 51.2 sqrt(lb)
Energy Check, E_C 125,877.8 ft-lb

d₁ 100.9 sqrt(lb)/ft

A 5165.0 lb/ft

A 430.4 lb/in

B 10179.0 lb/ft²

B 70.7 lb/in²

G 1310.4 lb

UNIT CONVERSION

US

Residual Crush Measurements, in:		
Two Measurements ▼		
C ₁ :	20.60	C ₁ : 20.00
C ₂ :	20.60	C ₂ : 20.60
		C ₃ : 21.00
		C ₄ : 20.60
		C ₅ : 20.60
		C ₆ : 20.60
Avg crush, in:		20.6