



*CENTER OF GRAVITY OF G-FORCE WITH CAVITIES AND IN BETWEEN ADJACENT BLOCKS FILLED WITH DRAINAGE FILL.

DESIGN DATA

HORIZONTAL SETBACK	9/16" (14 mm)
BLOCK WEIGHT	79 lb (36 kg)
INFILLED UNIT WEIGHT	122 lb/ft³ (19.2 kN/m³)
INFILLED CENTER OF GRAVITY	5 7/16" (138 mm)
"BLOCK SHEAR (ASTM 6916) "	$V_{ub} [lb/ft] = 545 + N \cdot \tan(38) \leq 3826$ $V_{ub} [kN/m] = 7.95 + N \cdot \tan(38) \leq 55.8$
"BLOCK - GEOGRID SHEAR (ASTM 6916) (MIRAGRID 3XT) "	$V_{ug} [lb/ft] = 445 + N \cdot \tan(36) \leq 3496$ $V_{ug} [kN/m] = 6.49 + N \cdot \tan(36) \leq 51.0$
"BLOCK - GEOGRID CONNECTION STRENGTH (MIRAGRID 3XT) (ASTM 6638) "	$T_c [lb/ft] = 1640 + N \cdot \tan(18) \leq 3005$ $T_c [kN/m] = 23.93 + N \cdot \tan(18) \leq 43.8$

PHYSICAL CHARACTERISTICS

COMPRESSIVE STRENGTH	5050 psi (35 MPa)
WATER ABSORPTION (MAX.)	9 lb/ft³ (144 Kg/m³)
FREEZE-THAW	1.0% MAX. LOSS OF MASS AFTER 100 CYCLES
	1.5% MAX. LOSS OF MASS AFTER 150 CYCLES
DIMENSIONAL TOLERANCES	HEIGHT: $\pm 1/16"$ (± 1.5 mm)
	WIDTH AND LENGTH: $\pm 1/8"$ (± 3.0 mm)
AGGREGATE INFILL VOLUME	PER UNIT $\pm .39$ ft³ (± 0.011 m³)
	PER WALL AREA $\pm .39$ ft³/ ft² (± 0.12 m³/m²)
AGGREGATE DRAINAGE COLUMN VOLUME	PER UNIT ± 1 ft³ (± 0.028 m³)
	PER WALL AREA ± 1 ft³/ ft² (± 0.30 m³/m²)

NOTE:

ASSUMED AGGREGATE UNIT WEIGHT OF 96.8 lb/ft³ (1550 kg/m³)

MEETS AND EXCEEDS THE REQUIREMENTS OF THE ASTM C 1372 STANDARD SPECIFICATION FOR DRYCAST SEGMENTAL RETAINING WALL UNITS.

THESE GRAPHICAL REPRESENTATIONS ARE INTENDED FOR PRELIMINARY DESIGN PURPOSES ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION. FINAL DESIGN SHOULD BE APPROVED BY A QUALIFIED, LICENSED PROFESSIONAL ENGINEER.



G-FORCE BLOCK DESIGN DATA

TECHO-BLOC RETAINING WALL SYSTEMS
TYPICAL WALL DETAILS

DATE: 28/06/2017

DRAWN BY: L. P.

SCALE: NONE

SHEET: 26