

AB TECH SHEET

ALLAN BLOCK RETAINING WALL UNITS TECHNICAL ATTRIBUTES

**ALLAN BLOCK
CORPORATION**
Ph. (952) 835-5309
Fax (952) 835-0013
allanblock.com



1. Allan Block Unit Specifications: per ASTM 1372

Standard Specifications for Segmental Retaining Wall Units

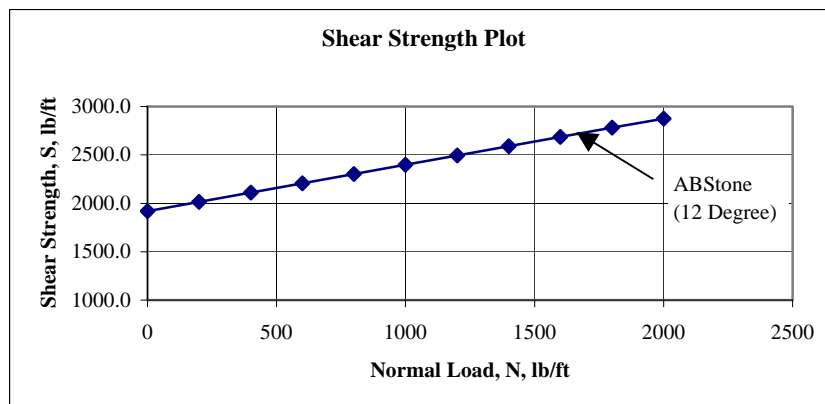
- Compressive Strength: Average of 3 units 3000 psi (20.7 MPa)
Any one individual unit 2500 psi (17.2 MPa)
- Water Absorption: Normal Weight Concrete 13 lb/ft³ (208 kg/m³)
- Freeze Thaw Durability:
 - Weight Loss Requirements
 - 1) weight loss of each of five test specimens at the conclusion of 100 cycles shall not exceed 1% of its initial weight; or
 - 2) the weight loss of each of four of the five test specimens at the conclusion of 150 cycles shall not exceed 1.5% of its initial weight.
 - Test Method: Standard Test Method for Evaluation the Freeze-Thaw Durability Manufactured Concrete Masonry Units and Related Concrete Units per ASTM 1262

2. Allan Block System Verification

- NCMA Test Method SRWU-2 Determination of Shear Strength between Segmental Concrete Units

Commentary:

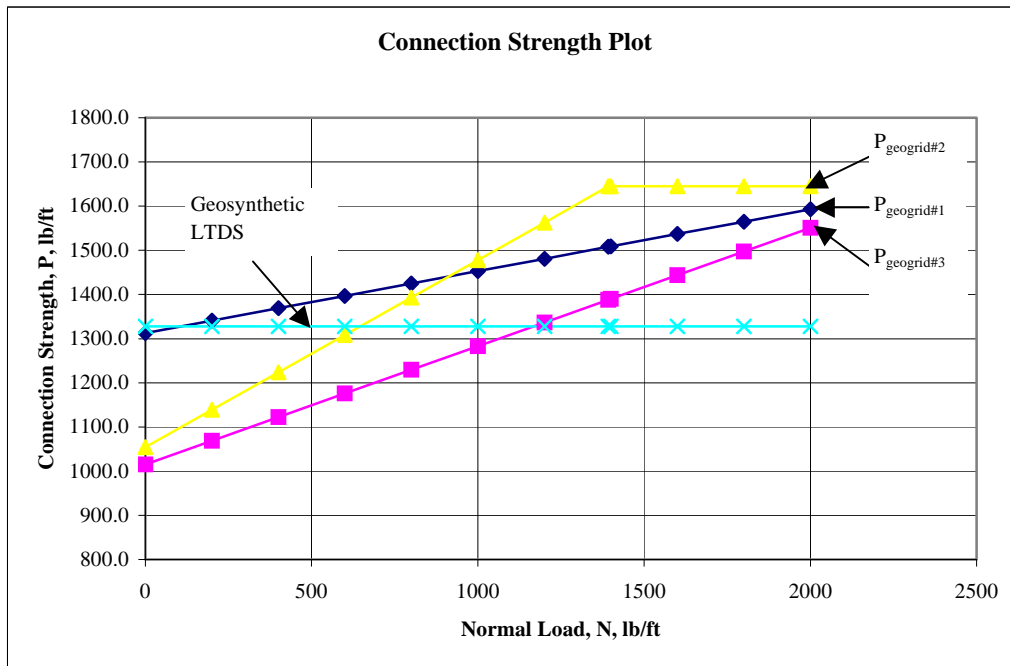
Allan Block's shear strength is a function of the raised front lip. This is a continuous precast concrete interlocking and alignment device that provides a tremendous amount of shear capacity. In order for block shear to occur the concrete within the lip must actually fail in shear.



- NCMA Test Method SRWU-1 Determination of Connection Strength between Geosynthetics and Segmental Concrete Units

Commentary:

The Allan Block System's connection strength is designed to utilize the mechanism between soil and geosynthetic reinforcement. The hollow cores of Allan Block filled with compacted drainage aggregate provide a contact area that interacts with geosynthetic reinforcements. The connection loads achieved by the locking together of the aggregate and geosynthetic are unmatched. The simple hollow core design of the Allan Block system eliminates connection strength as the limiting design element in an Allan Block Retaining Wall Design.



3. Government and Building Code Approvals

- U.S. DOT Approvals
Alaska, Indiana, Iowa, Illinois, Minnesota, Missouri, Montana, Massachusetts,, North Dakota, South Dakota, Utah, California, Texas, Delaware, Maine, New Hampshire, Maryland, New Jersey, Pennsylvania, New York, Rhode Island, Wisconsin.
- Canada MoTH Approval
British Columbia, Canada
- International Code of Building Officials (ICBO)
ICBO Evaluation Report
- Office of the State Architects Approval
California, United States
- U.S. ARMY Corp of Engineers Approval
Individual Project Approvals