

**SECTION 18.03**  
**TYPE B--IMPACT-ATTENUATION SYSTEM**

**18.03.01--Description:** Work under this item consists of furnishing and constructing crushable foam cartridge impact attenuation devices in conformance with the design, line, grades and dimensions shown on the plans or as directed by the Engineer.

**18.03.02--Materials:** Materials for the impact attenuator shall meet the manufacturer's specifications for the size and type shown on the plans of the system. It shall consist of crushable foam cartridges placed between rigid steel diaphragms in a multi-layered sandwich construction. The nose of the device shall be protected with a flexible belting material. The sides of the unit shall be protected by fender panels. The impact attenuator shall be solidly anchored at the front and rear.

Supports, connections, miscellaneous parts, concrete back-up walls or steel back-up plates and the anchorages necessary to develop the full potential of the impact attenuator shall be in conformance with the plans. A cover shall be supplied for the system to prevent the intrusion of debris, snow and ice, etc., into the system. Documentation shall be provided to the Engineer to demonstrate that the cover will not become a secondary hazard after an impact. A materials certificate as defined in 1.06.07 shall be submitted for each system supplied.

**18.03.03--Construction Methods:** The impact attenuator system shall be constructed in a neat, workmanlike manner as shown in the plans. All construction shall conform to manufacturer's recommendations or be as directed by the Engineer. Required site work shall be included in the unit price for the system.

**18.03.04--Method of Measurement:** This item will be measured for payment by the number of each Type B Impact Attenuation System installed in conformance with the plans and specifications and accepted by the Engineer.

**18.03.05--Basis of Payment:** This item shall be paid for at the Contract unit price each for "Type B Impact Attenuation System" of the model and size designated, complete in place, and shall include all costs for site preparation, materials, labor, tools, and equipment incidental thereto.

Pay Item	Pay Unit
Type B Impact Attenuation System (Model) (Size)	EA.