Patents Assigned to Sprung Instant Structures Ltd.

Door system for movable structures
Patent number: 9777505
Abstract: The present invention provides a door system for a temporary, movable structure having a plurality of spaced apart frame members and a membrane stretched between adjacent frame members. The door system has multiple modules movable between open and closed positions. Each module has its own membrane, separate from the membranes of the structure, which is stretched taught over the surface of the module. In the open position, the modules do not obstruct the opening in the structure, and the membranes of the modules and the structure do not go slack. The membranes of both the structure and the modules are always under tension, thus being less susceptible to damage.
Type: Grant
Filed: October 15, 2015
Date of Patent: October 3, 2017
Assignee: SPRUNG INSTANT STRUCTURES LTD.
Inventor: Philip D. Sprung

Stressed membrane structure
Patent number: 7849639

Abstract: A demountable building structure that is readily assembled from a set of components is disclosed. The building structure includes a plurality of arc frame members spaced along a length of the building structure. Each of the arc frame members extends from a first foot portion to a peak, and back to a second foot portion. Each of the arc frame members includes a plurality of beams. Each of the beams includes two opposed flanges. Each of the flanges has two bifurcated ends. The ends define c-shaped rope chases with openings. The building structure further includes bases slidably mateable with the first and second foot portions, and elongate membranes having beaded longitudinal edges. The membranes are stretched between adjacent of the arc frame members. The longitudinal edges are within the rope chases. Spreaders extend between adjacent of the arc frame members for urging apart the arc frame members from each other and for maintaining the membranes in a stretched condition.
Type: Grant
Filed: November 2, 2004
Date of Patent: December 14, 2010
Assignee: Sprung Instant Structures Ltd.
Inventor: Philip Davis Sprung

Stressed membrane structure

Publication number: 20060101730
Abstract: A demountable building structure that is readily assembled from a set of components is disclosed. The building structure includes a plurality of arc frame members spaced along a length of the building structure. Each of the arc frame members extends from a first foot portion to a peak, and back to a second foot portion. Each of the arc frame members includes a plurality of beams. Each of the beams includes two opposed flanges. Each of the flanges has two bifurcated ends. The ends define c-shaped rope chases with openings. The building structure further includes bases slidably mateable with the first and second foot portions, and elongate membranes having beaded longitudinal edges. The membranes are stretched between adjacent of the arc frame members. The longitudinal edges are within the rope chases. Spreaders extend between adjacent of the arc frame members for urging apart the arc frame members from each other and for maintaining the membranes in a stretched condition.
Type: Application
Filed: November 2, 2004
Publication date: May 18, 2006
Applicant: Sprung Instant Structures Ltd.
Inventor: Philip Sprung

Light and climate control system for pre-stressed fabric structures

Patent number: 4773191

Abstract: The present invention relates to a light and climate control system for pre-stressed fabric structures of the type having a plurality of arches and fabric under tension extending between adjacent to enclose a space. The fabric between the arches is composed of zones of exteriorly reflective opaque material and translucent material. The respective areas of the zones of these two materials are determined such that the zone of translucent material is of sufficient area to permit enough light to pass to the enclosed space during daylight, for adequate interior lighting of the enclosed space. The zone of reflective opaque material is of sufficient area to reduce solar radiation into the enclosed space to a degree which permits the air conditioner means to comfortably cool the interior.

Type: Grant

Filed: January 20, 1987

Date of Patent: September 27, 1988

Assignee: Sprung Instant Structures Ltd.

Inventor: James K. Slack