Sprung Structures

A Better Way To Build

Rapid Construction. Design Flexibility. Performance & Durability. Lower Overall Costs.

Waterford Farms

Strathmore, Alberta

Shrimp Farms

Project Overview:

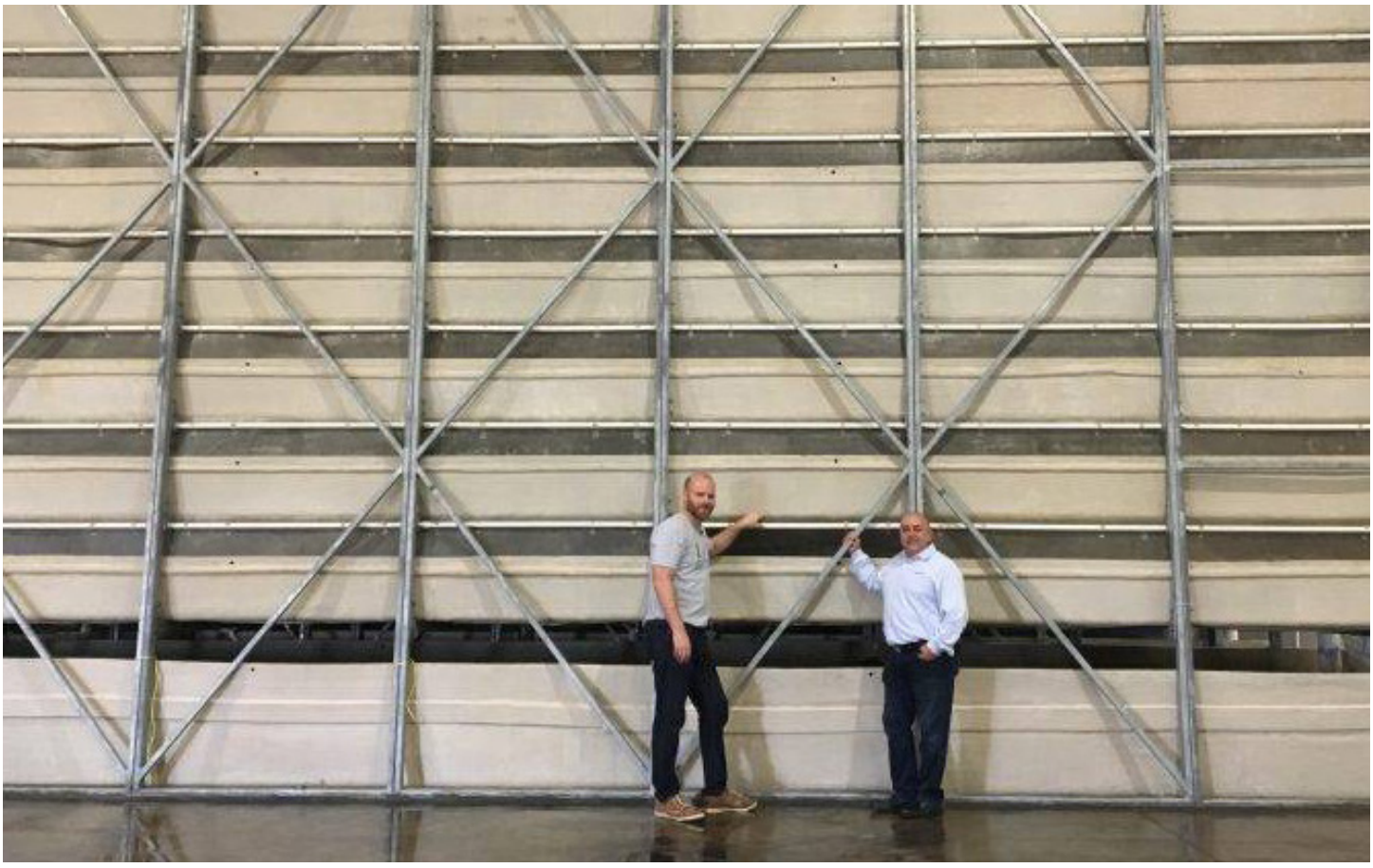
Client: Waterford Farms (formally Rocky Mountain Shrimp), Strathmore, Alberta

Challenge: Waterford Farms required a new facility to house their new state-of-the-art Shrimp growing farm as a pilot project. Knowing that they would have to control the temperature within a 3 to 4-degree variance and would have a high moister content due to the open water tanks the building envelope had to be constructed in a manor to meet these requirements. With a limited budget to get the project off the ground our Sprung solution that included our encapsulated insulation system provided a much higher quality structure over a conventional steal building.

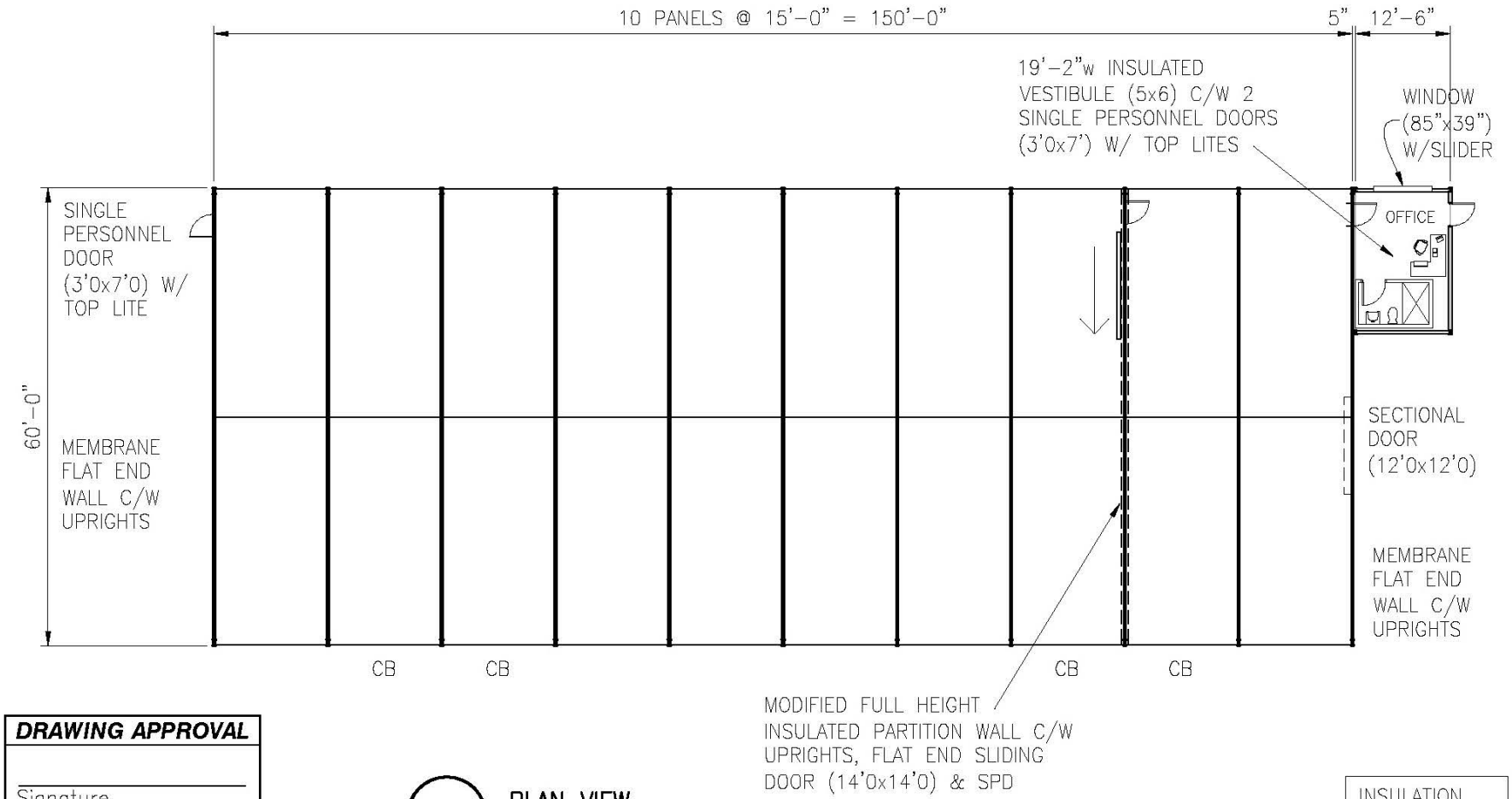
Solution: **60' wide by 150' long** with 8' leg extensions, encapsulated insulation

Results: The structure is preforming exactly as expected. Our superior encapsulated insulation system and airtight envelope allows Waterford Farms to keep the interior temperature at the optimal climate required to grow and harvest their shrimp. The facility was such a success that plans are in the works for an expansion at this location and a second location in Vancouver is expected to get under way in the summer of 2020.

Links: https://waterfordfarms.ca/



CB = CABLE BRACING



PLAN VIEW
1"=20'-0"

INSULATION TO BE ENCAPSULATED

DRAWING APPROVAL

Signature _____

Print Name _____

Date: _____

Confirmation of design loads at site per the local building dept.

WIND: q50_____ kPa
SNOW: Ss _____ kPa
SNOW: Sr _____ kPa
Initial _____

INTERIOR SHOWN FOR REFERENCE ONLY, FINAL LAYOUT DESIGNED & SUPPLIED BY OTHERS.

SIGNATURE SERIES

sprung

ENERPRO ENGINEERING INC

60.0' x 150.0'
SHRIMP FARM

DATE 05/02/2018

SCALE AS NOTED

DRAWING # F18-065A-R3

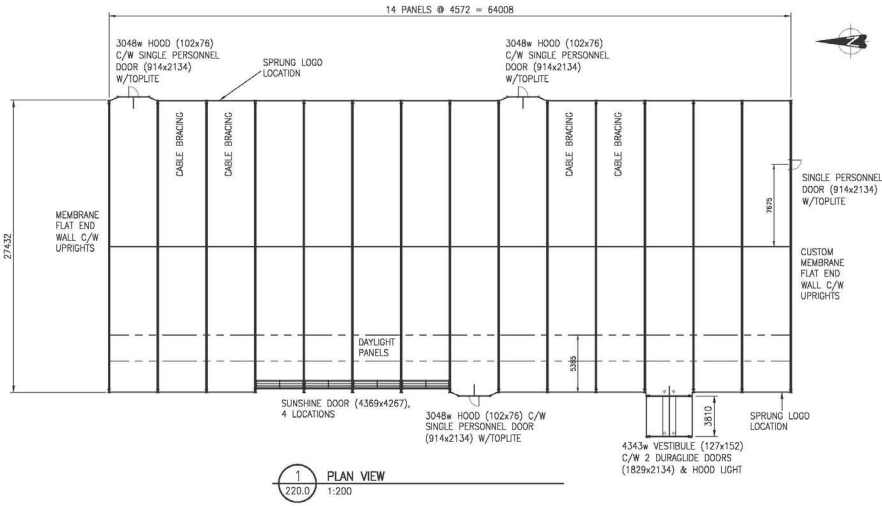
Top 5 Reasons to Choose Sprung:

1. **Immediate Delivery from Inventory** – Fabric tensioned structures can complete projects in a much shorter time-frame than conventional construction.
2. **Engineered for Even the Most Extreme Climates** – Enjoy peace of mind: Sprung structures are engineered to withstand extreme weather conditions.
3. **Limited to No Foundation Requirements** – Structures can be easily anchored to existing asphalt or raw earth.
4. **Airtight** – Air loss within a Sprung structure can be said to be almost zero due to the type of wall construction used. The entire building structure has been specifically designed to prevent air flow while maintaining strong structural integrity.
5. **Lease with Option to Purchase** – Increase your cash flow savings with Sprung's convenient in-house leasing program.

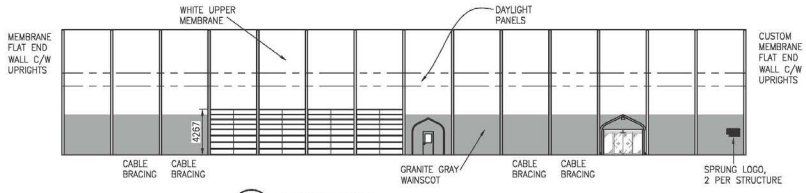
Sprung Structures

For four generations, Sprung has designed solutions for every conceivable application. Inventory-ready building solutions that consistently outperform other building alternatives.

- Sprung structures can be dismantled, reconfigured, re-erected, or relocated for almost any number of applications and virtually every market sector in the world.
- Beyond providing all-weather shelter for equipment and inventory, Sprung structures provide bright, spacious high performance, energy efficient environments.
- To date, Sprung has completed over 13,000 structures in more than 100 countries worldwide.

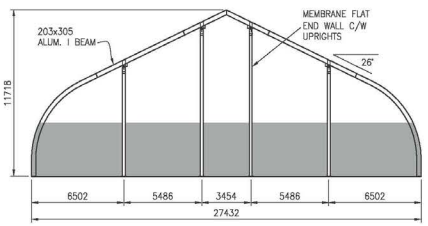


1 220.0 PLAN VIEW 1:200

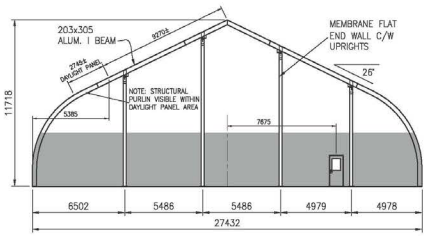


2 220.0 WEST ELEVATION 1:200

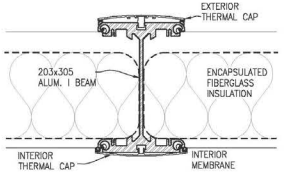
COLORS ON THESE ELEVATIONS MAY VARY SIGNIFICANTLY DEPENDING ON PRINTER OR MONITOR. PLEASE REFER TO MEMBRANE SAMPLES FOR ACTUAL COLORS.



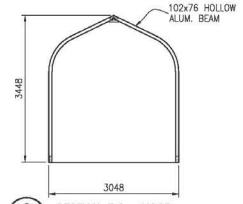
3 220.0 NORTH FLAT END 27.4m STRUCTURE 1:150



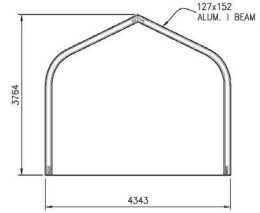
4 220.0 SOUTH CUSTOM FLAT END 27.4m STRUCTURE 1:150



5 220.0 203x305 INSULATED BEAM SECTION 1:5



6 220.0 SECTION 3.0m HOOD 1:50



7 220.0 SECTION 4.3m HOOD 1:50

DRAWING APPROVAL

Signature

Print Name

Date:

Confirmation of design loads at site per the local building dept.

WIND: q50 _____ kPa
SNOW: Ss _____ kPa
SNOW: Sr _____ kPa
Initial _____

sprung
innovation | versatility | reliability

TOLL FREE: 1-800-528-9899
OR (403) 245-3371 www.sprung.com

GENERAL NOTES:

1. ALL PERSONNEL DOORS C/W HOODS.
2. STRUCTURE TO BE INSULATED WITH FIBERGLASS BATT INSULATION C/W INNER LINER, TO SKYLIGHT LEVEL ONLY.
3. INNER & OUTER MEMBRANE TO BE FINISHED TO CONCRETE USING ALUM. FLAT BAR
4. STRUCTURE MEMBRANE MEETS: NFPA 701, CALIFORNIA STATE FIRE MARSHAL, ASTM E84, UBC 31-1, ULCS109, & ULCS102 SPECIFICATIONS
5. THIS STRUCTURE IS DESIGNED TO SHED SNOW. THE PERIMETER OF THE STRUCTURE SHOULD BE KEPT CLEAR.
6. WHEN DESIGNING A HEATING, VENTILATION OR AIR CONDITIONING SYSTEM FOR ANY TYPE OF BUILDING, IT IS IMPORTANT TO ENSURE THAT THIS SYSTEM INTAKES MORE AIR THAN IS BEING EXHAUSTED AT ANY GIVEN TIME. THIS PROCESS WILL RESULT IN A POSITIVE PRESSURE BEING MAINTAINED. CONVERSELY, IF NEGATIVE PRESSURE EXISTS WITHIN THE STRUCTURE, IT WILL BE DIFFICULT TO OPEN DOORS AND MOISTURE WILL BE DRAWN INTO THE STRUCTURE.
7. ALL INTERIOR WALLS & PARTITIONS (IF APPLICABLE) TO BE FREE STANDING & INDEPENDENT OF SPRUNG STRUCTURE.

DESIGN LOADS

STRUCTURE LOCATION: COLLINGWOOD, ON
BUILDING CODE: NBC
WIND PRESSURE (q50): 0.39 kPa
GROUND SNOW LOAD:
Ss: 2.7 kPa
Sr: 0.4 kPa

SIGNATURE SERIES

REV	DATE	DESCRIPTION
6	10/24/12	MOVE DAYLIGHT & PT. UPRIGHT
5	10/15/12	REMOVE ENHANCED SPREADERS
4	10/02/12	ADD WAINSCOT
3	10/01/12	RELOCATE SKYLIGHT
2	09/28/12	ADD CENTER PANEL & DOORS

BLT CONSTRUCTION
TOWN OF COLLINGWOOD

27.4m x 64.0m
SWIMMING POOL

DRAWN: D. BENNETT	DATE: 09/24/2012
CHECKED	APP'D
SCALE: AS NOTED	DRAWING #: P12-220.0
CUST.APPR.	