

# Cinema 180®



## Product Description:

Surround your audience with captivating color, action and sound. Memorable minutes of 'being there' transport you from one dramatic and electrifying experience to another. Exhibit this enormously successful 70mm film in a theater configuration designed to meet your space, mobility and budget requirements.

## Features and Benefits:

70mm 5 Perf 2.2 to 1 Wide  
Film Format

High Intensity Xenon Light  
Source

Point of View Action on a  
Gigantic Quadrispherically  
Shaped Screen

Family Oriented Spherical  
Film Spectaculars Shot on  
Location Around the World

Ten (10) Years of Entertaining  
Audiences and Making Money for  
Operators.

Fourteen (14) Films in the  
Library

Perfected, High Profit, Big  
Capacity, Fast Turnover,  
Easy to Maintain, Safe

Six (6) Channel Sound

Superior picture resolution and  
sharpness. 450% larger than 35mm  
film frame.

Colors are crisper and picture is  
brighter.

Audiences are visually surrounded with  
fascinating color action and sound.  
The viewer is transported for twelve  
minutes from one dramatic and  
electrifying experience to another as  
objects and horizons fly by on the giant  
screen.

People of all ages and nationalities  
return again and again for the fun and  
enjoyment. They tell their friends,  
relatives and neighbors about the  
excitement and thrill of Cinema 180®.

Proven top attraction at fairs,  
exhibitions, tourist areas, traveling  
shows, theme parks, shopping malls and  
similar high traffic locations.

Each new film shown creates a whole new  
attraction year after year.

Excellent cost / capacity ratio. Modest  
initial capital expenditure. Low  
operating and maintenance costs. Low  
insurance cost.

Surrounds audiences with clean  
transparent sound. The realism of  
sound effects is heightened.

(Over)



Equipment Supplied:

Cinema 180® Projection Systems  
Cinema 180® Lens  
Theater Structures with Screens for new installations  
Frame Supported Screens for existing structures  
Mobile Trailer Mounted Theaters  
Omnisound System - 6 Channels

Options:

Continuous Loop Film Cabinet  
Film Platter  
Mobile Air Conditioner  
Ticket Box  
Portable Foundation  
Decorative Facade  
Power Roof Ventilator  
Custom Exterior Color for Theater Structure

Services Available:

Technical Representative Services for installation and preventive maintenance.  
Custom Film Production  
Custom Film Titles for Sponsors  
Foreign Language Narrations

\*Film Available in 1986:

Crazy Wheels	Flight 747
International Thrill Show	Blockbuster
Cavalcade of Thrills	Pacific Pursuit
Galaxy of Thrills	Impact
Wild Wild West	Horizons
Fantastic Flights	Colossus
Thrills of America	Demon Shock

\* Available for lease only.

Lead Time:

Depending on Theater System Selected Ten (10) to Eighteen (18) weeks from confirmed contract order date.

Prices:

Quoted on Request

# Cinema 180®



## TECHNICAL DATA

### CINEMA 180® THEATER DOME MODELS 55A, 72A, 55XL & 72XL

#### **DESCRIPTION**

Cinema 180® is a 70mm film show attraction with strong drawing power. It surrounds an audience with captivating color, action and sound. Memorable minutes of "being there" transports them from one dramatic and electrifying experience to another on a giant quadrispherically shaped screen. Each viewer's automic nervous system perceives the experience as participatory.

Cinema 180® can play all year to a broad market including adult, family, child, teen, resident and tourist. New programs are as easy as making a selection from the Cinema 180® film library.

Cinema 180® offers high value and capacity for a low to moderate capital outlay. Sponsor appeal is high, operating and maintenance costs are low, and space requirements are minimal.

#### **APPLICATIONS**

Cinema 180® is ideally suited for presentation of Cinema 180® 70mm films at theme parks, amusement piers, planetariums, museums, World's Fairs, expositions, marine parks, industrial, commercial or institutional trade shows, sports arenas, stadiums, zoos and other high traffic locations.

#### **PRODUCT INFORMATION**

The Cinema 180® Theater Dome structure consists of a heavy-duty, flame resistant, vinyl-coated polyester roof and sidewall membrane tensioned over a galvanized steel frame. A quadrispherically shaped negative-pressure membrane projection screen attaches and seals to the frame and concrete floor. A blower located between the rear of the projection screen and the roof and sidewall membrane creates a negative pressure on the back side of the screen, causing it to take its proper quadrispheric shape.



Cinema 180® Theater Systems, available in four standard sizes, are specifically designed to exhibit Cinema 180®. Advantages offered by this system include fast delivery, consolidated packaging for efficient shipping, quick assembly, unobstructed clear span space, eye-catching design, good acoustics, low maintenance and high capacity.

All of the components selected for inclusion in the Theater System package have been selected with quality and dependability in mind.

**STANDING AUDIENCE CAPACITY**

	<u>Model 55A</u>	<u>Model 72A</u>	<u>Model 55XL</u>	<u>Model 72XL</u>
<b>Per Show</b>				
Standing/Seated	275/100	425/160	500/150	625/250
<b>Per Hour</b>				
Standing/Seated	825/300	1275/480	1500/450	1875/750

Note: Hourly capacities are based on three 12 minute shows per hour.

**FOUNDATION DESIGN**

To assist customers in proper foundation design, a Foundation Layout Drawing will be supplied indicating anchor bolt locations, concrete foundation piers, grade beam, floor, screen attachment on floor and base reaction loads for final foundation design by customer's registered professional engineer.

The final foundation design will be determined by the base reaction loads, soil conditions, wind and snow load requirements and local building code regulations. The final stamped foundation design, and all related costs shall be the responsibility of the customer.

**MEASUREMENTS (Nominal)****MODEL 55A  
THEATER SYSTEM****MODEL 72A  
THEATER SYSTEM**

	Standard		Metric		Standard		Metric	
<b>Structure</b>								
Plan Shape	Hexagon		Hexagon		Hexagon		Hexagon	
Width	55	ft.	16.76	m	72	ft.	21.95	m
Length	47.5	ft.	14.48	m	62	ft.	18.90	m
Interior Height	27	ft.	8.23	m	27	ft.	8.23	m
Exterior Height	30	ft.	9.14	m	30	ft.	9.14	m
Floor Area	1,965	sq.ft.	183	sq.m	3,367	sq.ft.	313	sq.m
Surface Area	5,140	sq.ft.	478	sq.m	5,713	sq.ft.	531	sq.m
Volume	39,000	cu.ft.	1104	cu.m	64,700	cu.ft.	1832	cu.m
<b>Gravity Ventilator</b>								
	one (1)		one (1)		one (1)		one (1)	
Diameter	20	in.	50.8	cm	24	in.	60.96	cm
Height	19.5	in.	49.53	cm	22	in.	55.88	cm
<b>Projection Screen</b>								
Width	42	ft.	12.80	m	50	ft.	15.24	m
Height (Center)	26	ft.	7.93	m	26	ft.	7.93	m
Depth (Center)	18	ft.	5.49	m	21	ft.	6.4	m
<b>Double Door</b>								
	two (2)		two (2)		two (2)		two (2)	
Width	6	ft.	1.83	m	6	ft.	1.83	m
Height	6.66	ft.	2.03	m	6.66	ft.	2.03	m
<b>Shipping (Incl. Dome, Projection, Sound)</b>								
Weight	18,067	lbs.	8195	kg	20,067	lbs.	9102	kg
Cubic	1838	cu.ft.	52.2	cu.m	1938	cu.ft.	54.85	cu.m

**MEASUREMENTS (Nominal)****MODEL 55XL  
THEATER SYSTEM****MODEL 72XL  
THEATER SYSTEM**

Standard

Metric

Standard

Metric

**Structure**

Plan Shape

Hexagon w/16ft.(4.88m)  
Bay SectionHexagon w/20ft.(6.10m)  
Bay Section

Width

55 ft.

16.76m

72 ft.

21.95m

Length

63 ft.

19.20m

82 ft.

24.99m

Interior Height

20 ft.

6.17m

27 ft.

8.23m

Exterior Height

23 ft.

7.01m

30 ft.

9.14m

Floor Area

2845 sq.ft.

264.30 sq.m

4807 sq.ft.

446.57sq.m

Surface Area

4336 sq.ft.

403.00 sq.m

7713 sq.ft.

716.6 sq.m

Volume

41644 cu.ft.

1179 cu.m

98700 cu.ft.

2795 cu.m

Gravity Ventilator

two(2)

two(2)

two(2)

two(2)

Projection Screen

Width

42 ft.

12.80 m

50 ft.

15.24 m

Height (center)

19 ft.

5.79 m

26 ft.

7.93 m

Depth (center)

16 ft.

4.88 m

21 ft.

6.40 m

Double Door

two(2)

two(2)

two(2)

two(2)

Shipping (incl. Dome, Projection, Sound)

Weight

17,147 lbs.

7779 kg

20,387 lbs.

9248 kg

Cubic

1895 cu.ft.

53.63 cu.m

2095 cu.ft.

59.29 cu.

## DESIGN - MODELS 55A, 72A 55XL AND 72XL

	<u>Standard</u>	<u>Metric</u>
Live Load	25 lbs/sq.ft.	122 kg/sq.m
Wind Load	29 lbs/sq.ft.	141.6kg/sq.m
Wind Speed	120 m.p.h.	193 km/hr.
Seismic Load	Risk Zone 4	Risk Zone 4

### FIRE RESISTANCE

The Shelter-Rite fabrics used in the roof, sidewalls and projection screen meet the flame-resistant requirements of NFPA 701, California State Fire Marshal Code Title 19, UL 214 and Federal Standard 191. The fabrics will not support combustion. When a flame source is removed, the fabric will self-extinguish within two seconds.

### SITE PREPARATION

Prior to arrival on site by the technical representative(s), purchaser must have site free and clear and completely prepared in a manner suitable for erection and installation of the delivered merchandise. The normal steps required to prepare a site completely are as follows:

- Clear and level site intended for theater dome installation.
- Lay out foundation.
- Dig holes for foundation piers and trench between piers for grade beam.
- Form piers and grade beam.
- Run conduit and wire for 1) projection booth or low profile projection system, depending on Theater Dome Model supplied, 2) screen blower, 3) speakers, 4) house lights, 5) exit lights
- Set reinforcing bar in piers and concrete grade beam.
- Lay out wire reinforcing mesh for floor and door pads and make provision for audience handrail stanchion inserts (supplied by customer).
- Set anchor bolts (Shipped in advance of foundation pour.).
- Pour and finish minimum 2500 psi concrete for piers, grade beam and 4" floor and let cure for four to seven days previous to installation of theater dome.

### INSTALLATION SEQUENCE

The purchaser and/or his general contractor must provide 1) power sufficient to operate tools, 2) a competent installation supervisor and labor crew, 3) all necessary equipment and equipment operators to complete installation of the delivered merchandise. Installation of a Cinema 180® Theater System normally follows the sequence listed below:

- Off load truck or container and sort load.
- Assemble steel frame on the ground into 1/2 arches.
- Install membrane seal for connection hub and screen arch.
- Erect steel frame.
- Install cross-cable bracing to frame.
- Install projection screen anchor base angle to concrete floor.
- Install vertical screen angles to frame.
- Attach continuous screen support angle to vertical screen angles.
- Set prefabricated Omni Films Projection Booth (if supplied) into position. If Low Profile Projection System is supplied, booth will not be required. Low Profile System should be installed after the Theater Dome erection has been completed.
- Lift pre-folded roof and sidewall membrane onto the connection hub at the center of the steel frame. (Leave in pre-folded configuration).
- Spread membrane over frame.
- Tension membrane to frame via catenary tensioning cables provided in pocket welds extending between and connecting to the tensioning device provided at each of the columns.
- Install Gravity Ventilator(s).
- Seal membrane to foundation.
- Install two double doors including frame, door panels and entrance canopy for each door.
- Install fabric projection screen to continuous rolled screen angle and anchor base angle.
- Install 15" blower with electric motor and attach to exit air duct in sidewall behind screen.
- Install Projection and Sound Equipment.

#### **MANPOWER AND EQUIPMENT REQUIRMENTS**

- One (1) Supervisor, preferably experienced in steel erection.
- Five (5) Laborers, perferably experienced in steel erection and able to work at 30 foot (9.133m) heights.
- One (1) Electrician.
- Two (2) Projectionists.
- Safety items for crew, i.e. hard hats, safety harnesses, etc.
- One (1) 80 foot (24.38m) boom crane with minimum 20 ton capacity plus assortment of cable or nylon slings.
- One (1) 30 foot (9.14m) scaffold mounted on wheels (lock type) for ease of movement for 55A, 72A, & 72XL. One (1) 24 foot (7.32m) for 55XL).
- One (1 ) 30 foot (9.14m) extension ladder for 55A, 72A & 72XL.
- One (1) 24 foot (7.32m) for 55XL.
- One (1) 8 foot (2.44M) stepladder.
- Two (2) 3/8" electric drills with assorted drill bits and 100 feet (30.48m) of extension cord.
- Two (2) 1-1/2 ton chain or cable come-a-longs for tensioning the fabric roof membrane.
- One (1) set open end box wrenches from 1/4" to 1-1/4".



- Two (2) block and tackle with rope adequate to make a 30 foot (9.14m) lift.
- One (1) pry bar.
- One (1) bolt cutter.
- Two (2) 3/8" drive ratchets and two 3/8" drives with deep sockets up to 1-1/4".
- One (1) builder's level.
- Two (2) work lights.
- Two (2) razor or utility knives.
- Two (2) 7/16" wrenches (72X and 72XL only)
- Assorted hand tools to include drift pins, adjustable wrenches, hammers, vice grips, pliers, hack saw, screwdrivers and other assorted hand tools.
- Recommended Standby Items:
  - One (1) combination generator-welder with minimum 200 amp capacity with welding rods.
  - One (1) cutting torch.

#### **APPROXIMATE INSTALLATION TIME**

Based on past experience, installation of a Cinema 180® Theater System is expected to be in the range of the time indicated below:

- One (1) Supervisor - 12 days
- Four (4) to five (5) Laborers - 8 days
- One (1) Electrician - 3 days
- Two (2) Projectionists - 4 days
- One (1) 80 foot boom crane - 2 days
- One (1) Scaffold - 6 days
- One (1) Combination generator-welder - 3 days
- One (1) Cutting torch - 3 days
- All other tools - 8 days

The information presented above is provided as a helpful guide. It does not take into account any delays such as bad weather, strikes, equipment breakdown, etc. Approximate times above do not include site preparation; or installation of electric, air conditioning, facade, or queue rails. Omni Films International, Inc. and Seaman Corporation Building Systems Division assume no obligation or liability whatever in connection with the information presented above.

## **ELECTRICAL REQUIREMENTS**

50 Hertz - 6KW; 230/380 Volt; 3-Phase  
60 Hertz - 6KW; 110/220 Volt; 3-Phase

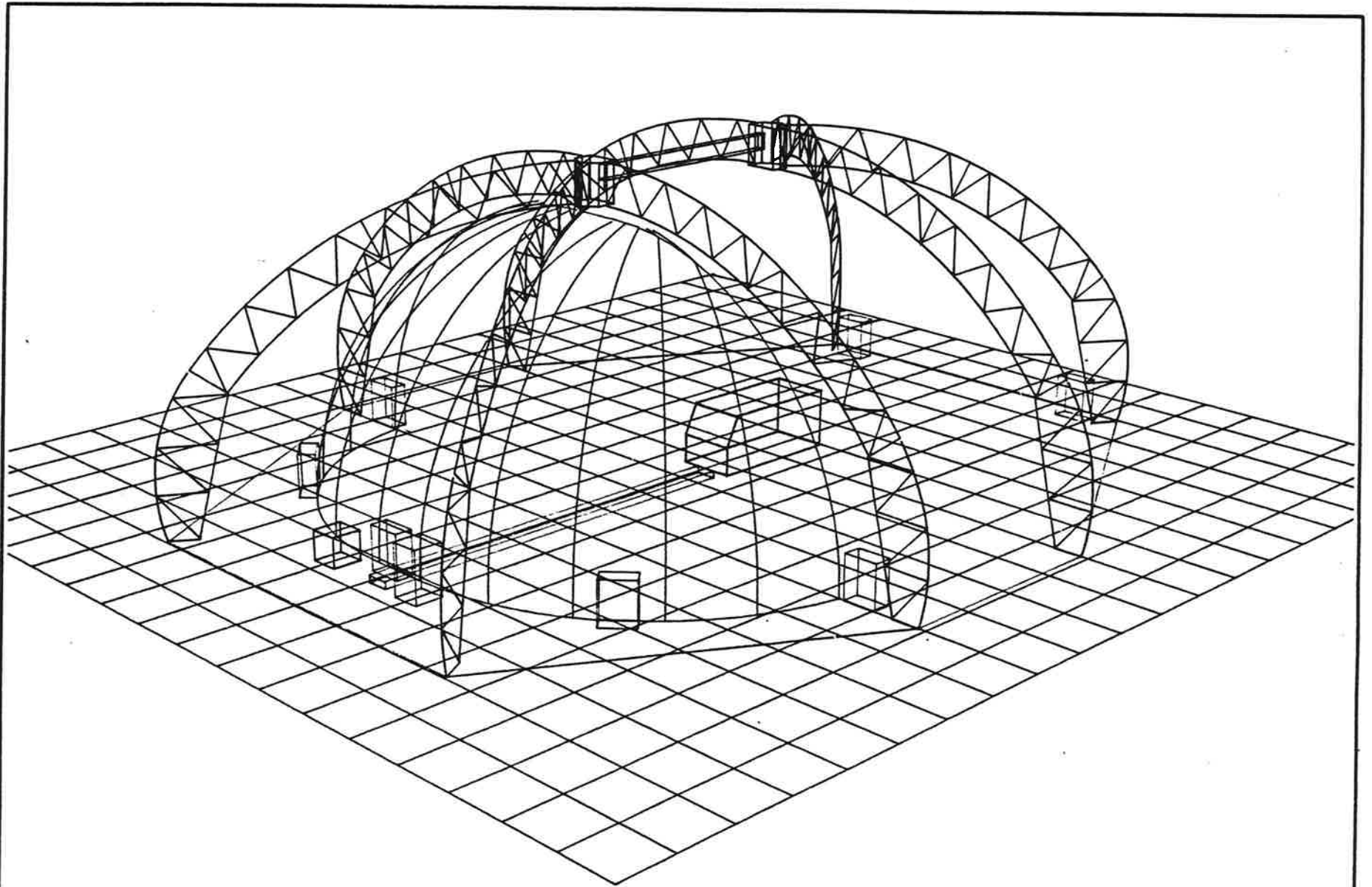
Note: Additional power will be required if Theater has lighted decorative facade and/or air conditioning.

## **OPERATING PERSONNEL**

One (1) Projectionist  
One (1) Usher (on high traffic days)

## **MAINTENANCE**

Annual maintenance expense will average approximately \$2,900 per year for the 4500 Watt projection system to \$3,300 per year for the 7000 Watt projection system. Approximate annual expense includes one replacement Xenon projection lamp, miscellaneous spare parts, and prorated expenses for some long life components such as sound head and projector intermittent assembly.



OMNI FILMS  
INTERNATIONAL, INC.

MODEL 55XL CINEMA 180  
THEATER SYSTEM

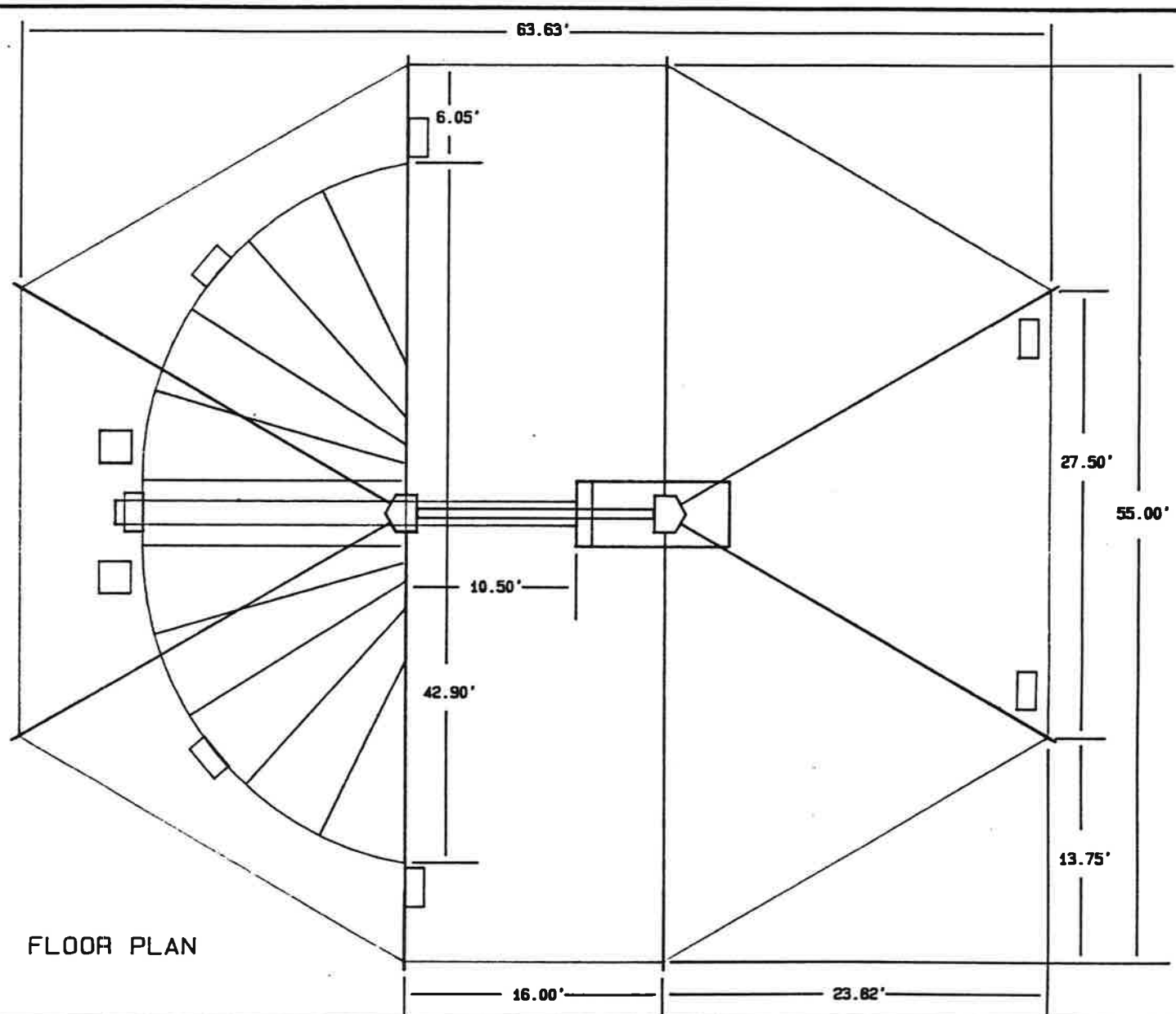
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Rev.: B



FLOOR PLAN

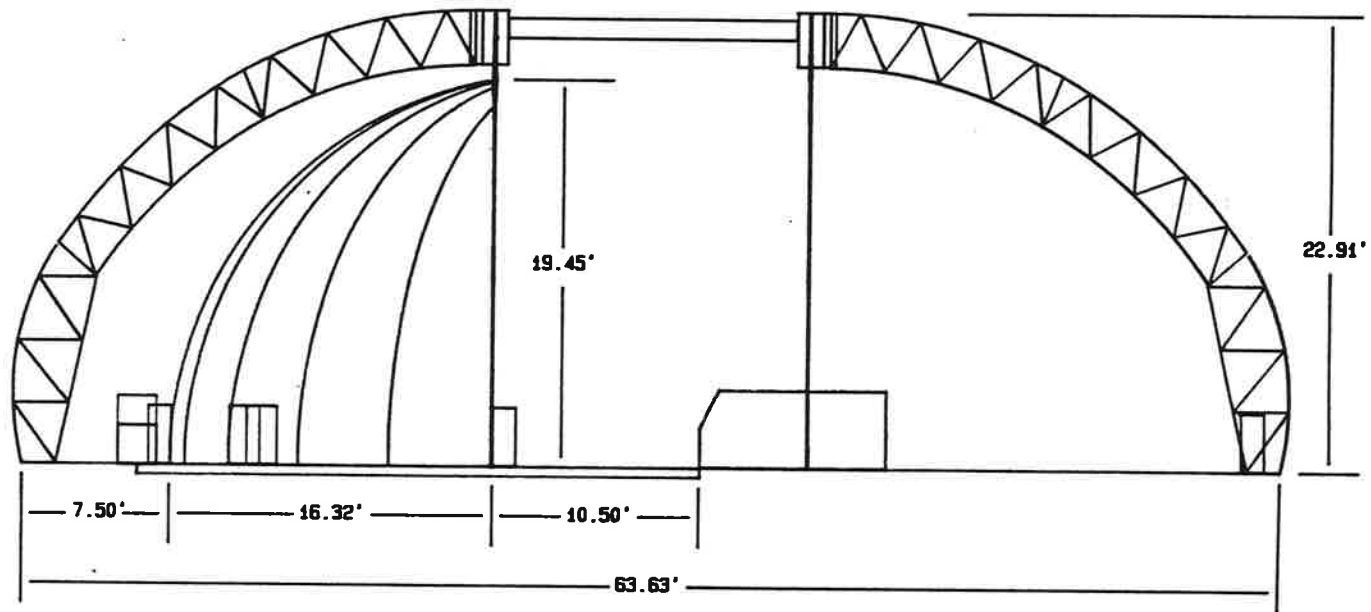
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INTERNATIONAL, INC.

MODEL 55XL CINEMA 180  
THEATER SYSTEM

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SIDE ELEVATION

OMNI FILMS  
INTERNATIONAL, INC.

MODEL 55XL CINEMA 180  
THEATER SYSTEM

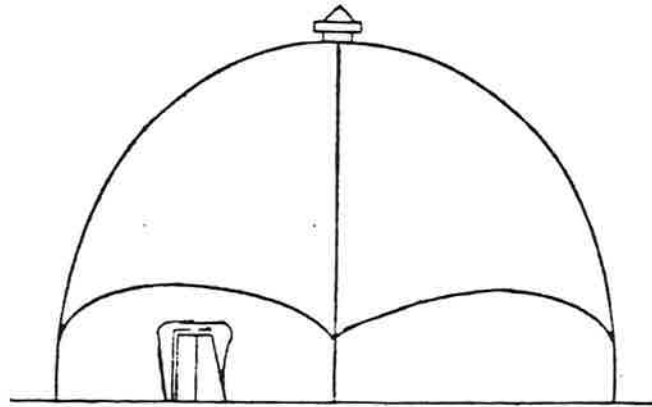
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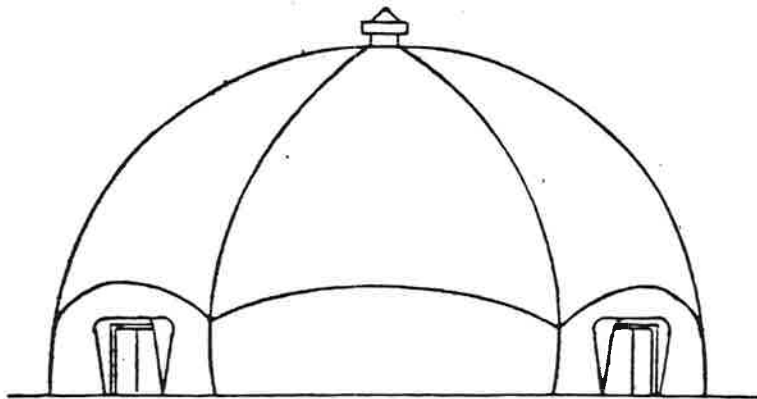
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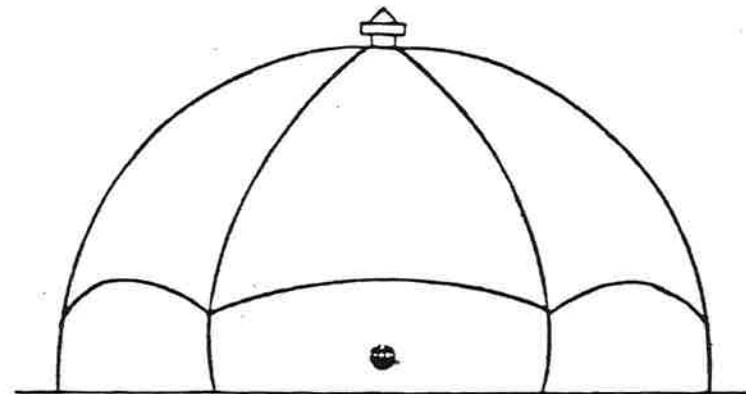
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SIDE ELEVATION

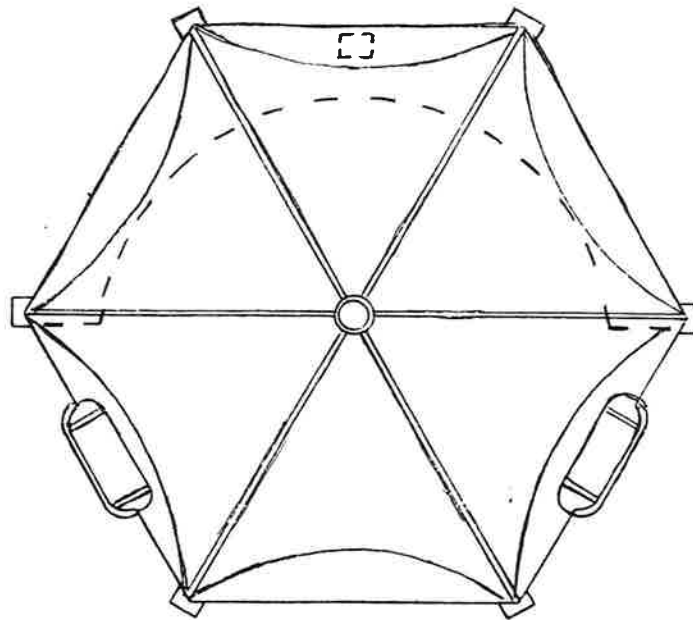


FRONT ELEVATION



REAR ELEVATION

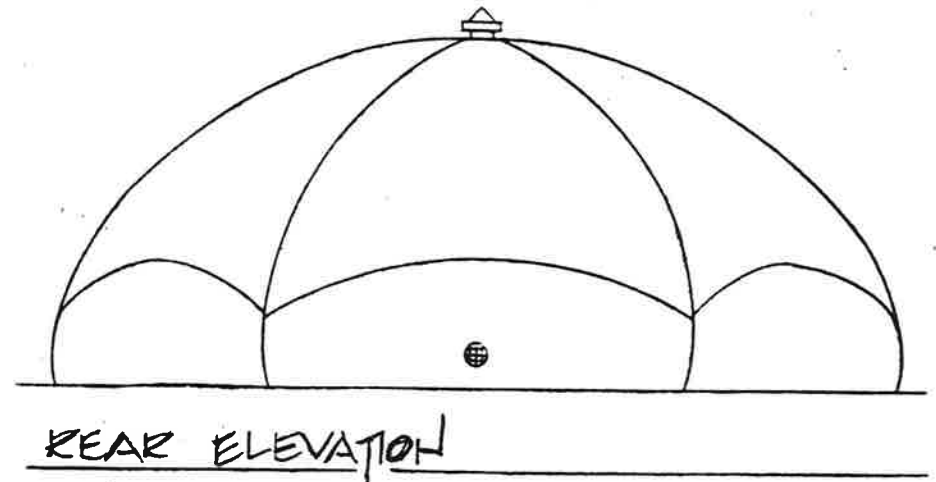
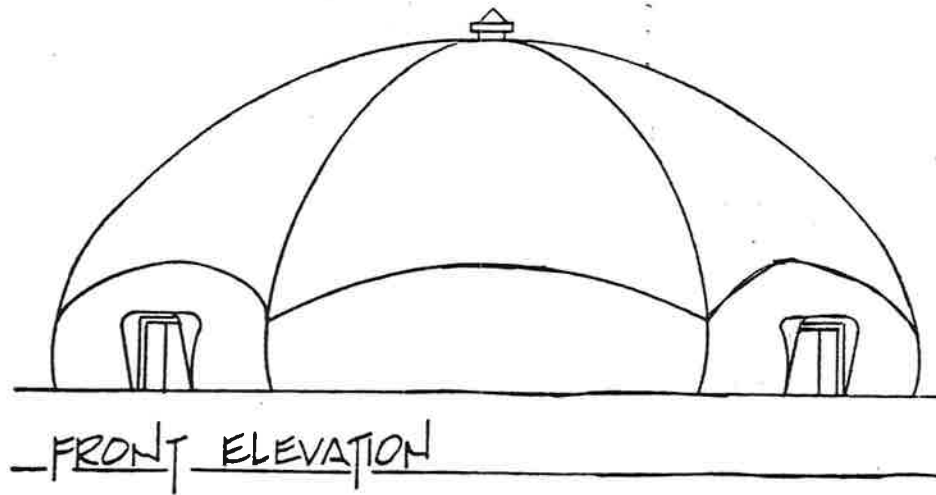
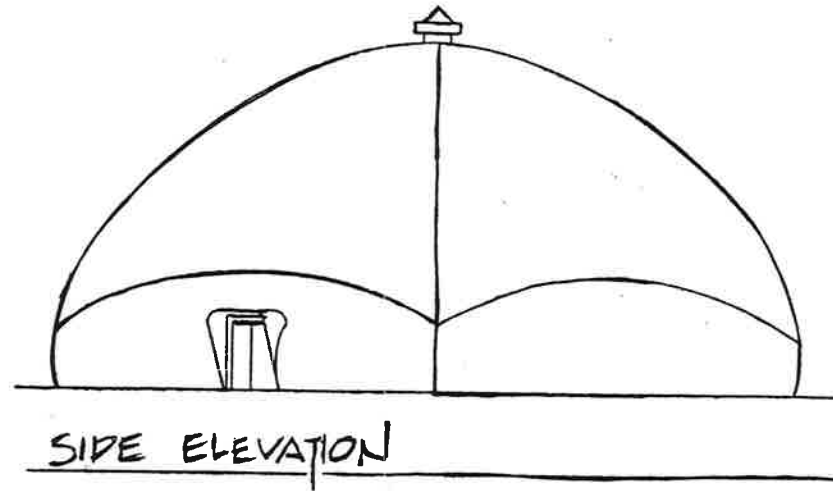
MODEL 55A CINEMA 180 THEATRE SYSTEM  
OMNI FILMS INTERNATIONAL, INC.



PLAN VIEW

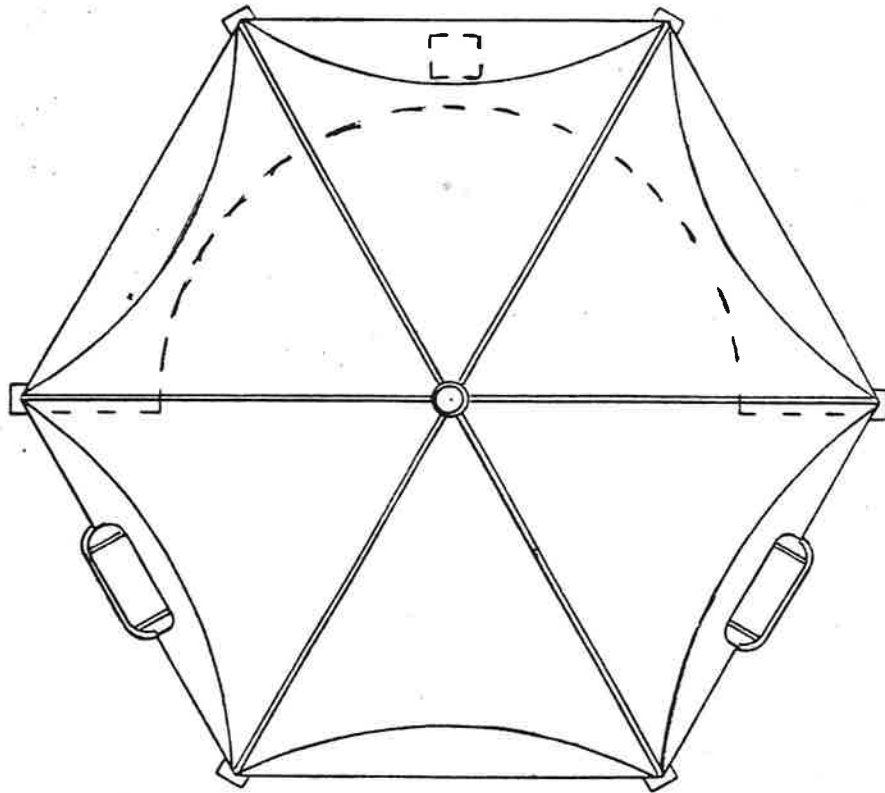
FLOOR AREA:	1965 SQ. FT.
	183 SQ. FT.
SURFACE AREA:	5140 SQ. FT.
	478 SQ. FT.
VOLUME:	37000 CU. FT.
	1104 CU. FT.
VENTILATOR	20 IN.
	50.8 CFT.
SHIPPING:	
CUBES	1200 CU. FT.
	34 CU. FT.

MODEL 55A CINEMA 180 THEATRE SYSTEM  
 OMNI FILMS INTERNATIONAL INC.



MODEL 72A CINEMA 180 THEATRE SYSTEM  
OMNI FILMS INTERNATIONAL INC.

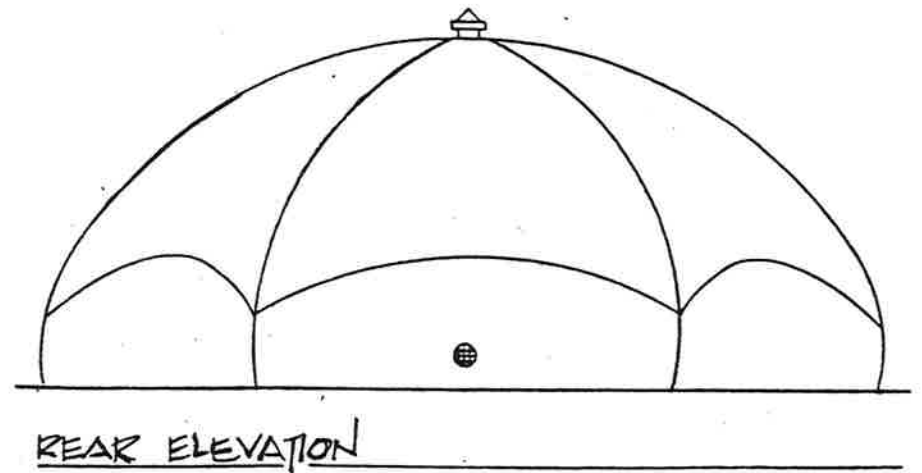
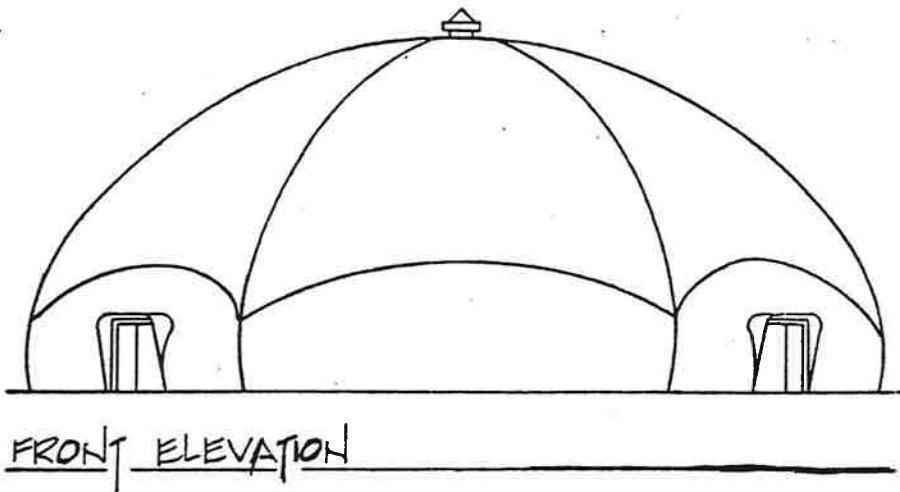
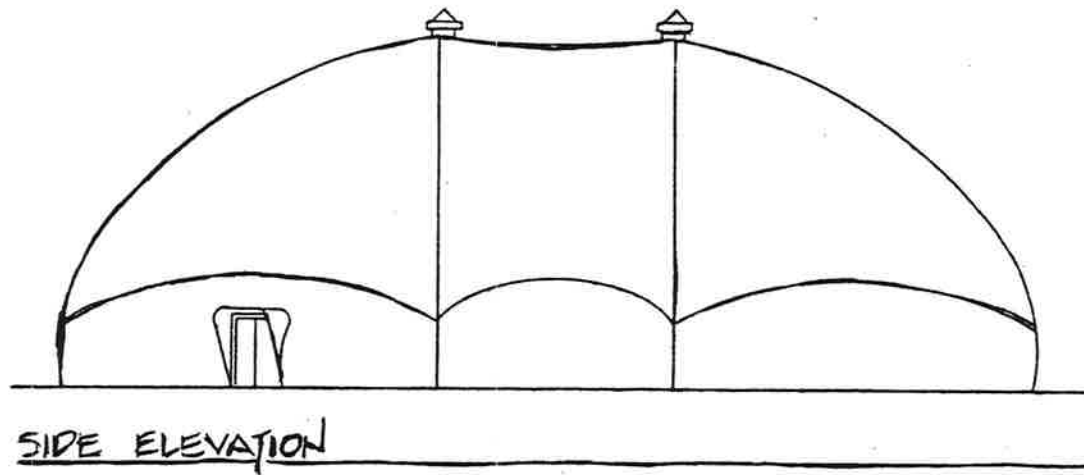




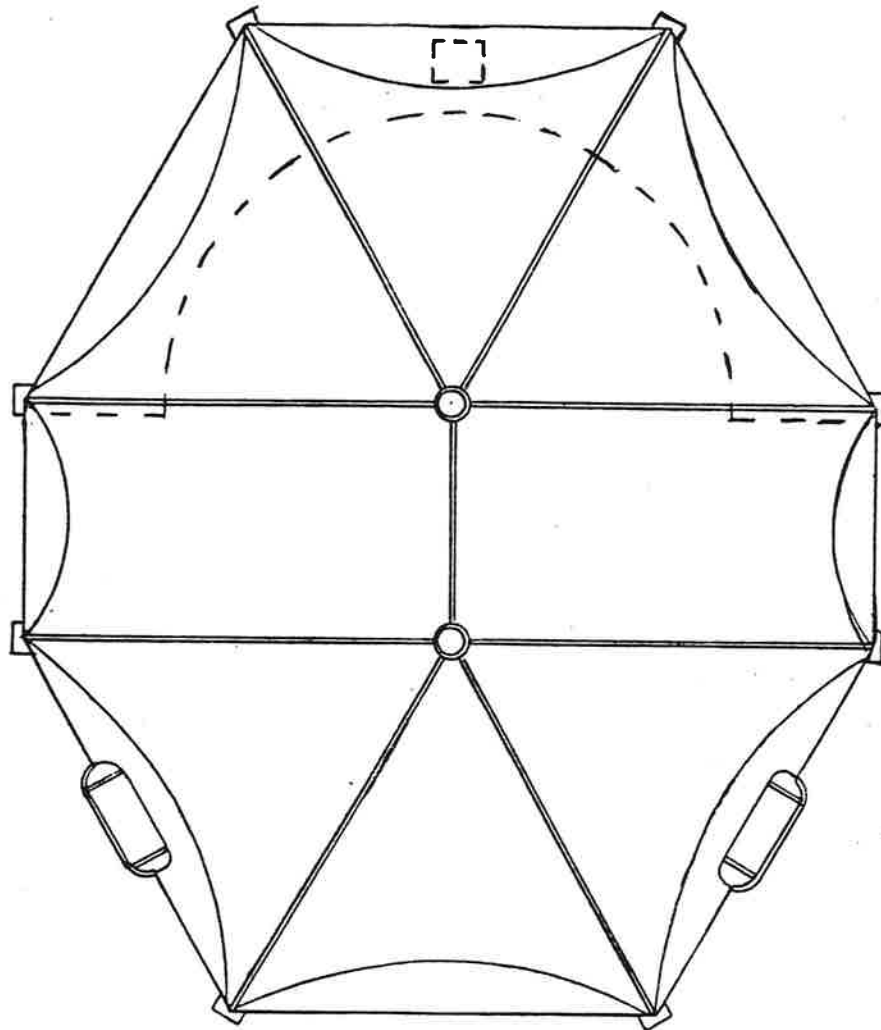
PLAN VIEW

FLOOR AREA:	3367 SQ. FT.
	313 SQ. FT.
SURFACE AREA:	5713 SQ. FT.
	531 SQ. FT.
VOLUME	64700 CU. FT.
	1832 CU. FT.
VENTILATOR:	24 IN.
	60.96 CM.
SHIPPING:	
CUBES:	1300 CU. FT.
	36.4 CU. M.

MODEL 72 A CINEMA 180 THEATRE SYSTEM  
OMNI FILMS INTERNATIONAL INC.



MODEL 72XL CINEMA 180 THEATRE SYSTEM  
OMNI FILMS INTERNATIONAL INC.



PLAN VIEW

FLOOR AREA: 4807 SQ. FT.  
 446.57 SQ. FT.  
 SURFACE AREA: 7713 SQ. FT.  
 716.6 SQ. FT.  
 VOLUME: 98700 CU. FT.  
 2795 CU. FT.  
 VENTILATOR: (2) 24 IN  
 (2) 60.96 CFT.  
 SHIPPING:  
 CUBES 19000 CU. FT.  
 53.2 CU. FT.

MODEL 72XL CINEMA 180 THEATRE SYSTEM  
 OMNI FILMS INTERNATIONAL INC.