

NATURAL SPACES DOMES

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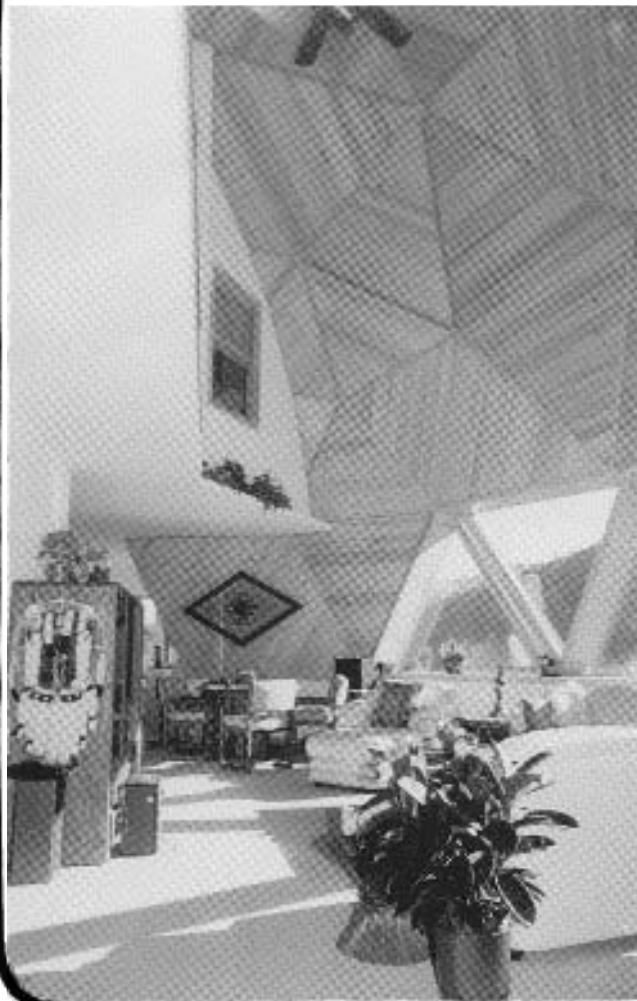


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NATURAL SPACES DOMES STAFF IN FRONT OF OUR 36 DIAM. OFFICE DOME

SPACESHIP EARTH HAS LIMITED RESOURCES. OUR FUTURE DEPENDS ON WHAT WE DO WITH WHAT WE HAVE LEFT.

THE PHILOSOPHY OF NATURAL SPACES DOMES IS TO ENCOURAGE PEOPLE TO STOP BUILDING RESOURCE DEPLETING HOUSES, WHOSE DESIGNS ARE BASED ON THE LAST 100 YEARS.

INSTEAD, WE WANT PEOPLE TO START BUILDING AN INSPIRING, PERSONAL LIVING ENVIRONMENT, DESIGNED FOR THE NEXT 100 YEARS.

A CENTURY IN WHICH INTELLIGENT, INNOVATIVE HOUSING DECISIONS, LIKE OUR NATURAL SPACES DOMES, WILL PROVIDE A BENEFIT FOR THE EARTH AND ITS INHABITANTS.

BUCKMINSTER BUCKY FULLER HAS TO BE GIVEN CREDIT FOR THE EARLY DEVELOPMENT AND PROMOTION OF THE GEODESIC DOME, STARTING IN THE 40 S. HIS DESIGN TEAM CREATED SPECTACULAR, HUGE DOME ENCLOSURES FOR MANY USES. HE WAS A PROLIFIC INVENTOR, TEACHER AND CONSUMMATE LECTURER UNTIL HIS DEATH IN JULY 1983. IT WAS A PLEASURE AND HONOR TO HAVE MET HIM.

DENNIS ODIN JOHNSON, OWNER OF NATURAL SPACES DOMES, HAS BEEN PERSONALLY INVOLVED AND COMMITTED TO THE ADVANCEMENT OF DOME HOMES SINCE 1971.

DENNIS COMES FROM GENERATIONS OF BUILDERS AND CRAFTERS. HIS HOUSE DESIGNING GOES BACK TO 7TH GRADE, A LONG, LONG TIME AGO (1955).

HIS BACKGROUND INCLUDES 11 YEARS AS AN ARCHITECTURAL DESIGNER AND PROJECT MANAGER FOR GINGOLD-PINK ARCHITECTS, WORKING IN LOS ANGELES AND MINNEAPOLIS.

IN 1972, DENNIS, WITH HIS LATE WIFE JANET, FOUNDED THE BIG OUTDOORS PEOPLE, A DOME COMPANY THAT CREATED OVER 350 DOMES IN 6 YEARS. IN 1978, THEY FORMED NATURAL SPACES DOMES, COMPLETELY REVAMPING THE DOME SYSTEM. THEY ELIMINATED PROBLEMS, INCORPORATED NEW, UPDATED TECHNOLOGY AND PATENTED A SIMPLE, STRONG, EASY TO USE DOME BUILDING SYSTEM.

NATURAL SPACES DOMES ARE EASY TO BUILD, PERSONALLY DESIGNED, HEALTHY, RESOURCE EFFICIENT AND FANTASTICALLY ENERGY CONSERVING. READ ON AND LEARN.

Natural Spaces Domes

LIVING IN THE ROUND IS NOT EXACTLY NEW. CAVE DWELLERS, KURDS, BEDOUINS, BEES, MEDIEVAL MONKS, INDIANS, ESKIMOS AND ZULUS, TO NAME A FEW, HAVE TRIED IT. BUT IT TOOK THE GENIUS OF THE LATE R. BUCKMINSTER FULLER, WHOSE BRILLIANTLY ENGINEERED STRUCTURES WERE USED IN RADAR DOMES ON THE ARCTIC DEW LINE AFTER WORLD WAR II, TO DEMONSTRATE CONCLUSIVELY THAT FOR THE MATERIAL USED, DOMES ARE THE STRONGEST MOST EFFICIENT WAY TO ENCLOSE SPACE.



THE DOME OWNERS WHO EXPERIENCE DOME LIVING EVERY DAY OFFER THEIR VIEWS. . . .

THERE IS SUCH AN AWARENESS OF NATURE IN OUR DOME. IT MUST BE ALL THE WINDOWS AND SKYLIGHTS.

FOLLOWING THE FIRST SEASONAL SHIFT THROUGH ALL THE GLASS HAS BEEN A GLORIOUS NATURE LESSON. ANTICIPATING THE NEXT SEASON IS EXHILARATING.

WE NEVER THOUGHT THAT LIVING IN A DOME HOME WOULD BE AS FUN AS IT IS. THE KIDS THINK IT'S JUST GREAT. WE DON'T THINK WE WILL EVER BE BORED WITH LIVING HERE.

REJUVENATING

SURPRISING

HUMANLY ELEGANT

PROVOCATIVE

BREATH TAKING

A VERY PERSONAL HOME

THE ULTIMATE ENERGY PENNY PINCHER



so much more than just a shelter

IN CONTRAST TO THE MID-60S, WHEN MOST DOME HOMES WERE FUNKY, PATCHED-UP SYMBOLS OF THE COUNTERCULTURE, TODAY'S AVERAGE DOME BUYER IS RATHER MIDDLE-AMERICAN. WE'RE BUILDING A BASIC AMERICAN HOUSING UNIT THAT IS A NATURAL AND INTELLIGENT ALTERNATIVE TO EXPENSIVE AND INEFFICIENT HOUSING. DOME-HOMERS SPEAK LYRICALLY OF THE FEELING OF SPACIOUSNESS, OF AN ALMOST MYSTICAL AIRINESS INDUCED BY LIVING UNDER A SKYLIT CANOPY.

IN A PLACE OF TIME CONSUMING CONVENTIONAL CONSTRUCTION, NATURAL SPACES OFFERS PRECISE FACTORY ENGINEERING: SOLID, INTERLOCKING COMPONENTS, PRE-CUT FOR FASTER ASSEMBLY.

IN PLACE OF MINIMALLY DESIGNED STRUCTURE BASED ON RECTANGLES, OUR DOMES ARE BASED ON NATURE'S STRONGEST, MOST EFFICIENT SHAPES - THE TRIANGLE AND THE SPHERE.

IN PLACE OF VINYL, ALUMINUM AND SHEETROCK, OUR DOMES OFFER ALL THE WARMTH AND NATURAL BEAUTY OF WOOD.

IN PLACE OF TYPICAL, LOOK-ALIKE HOUSING, OUR DOMES OFFER ALMOST UNLIMITED DESIGN FLEXIBILITY. UNIQUE, EXHILARATING, NEVER BEFORE IMAGINED SPACES.

WHETHER YOU PREFER COUNTRY-STYLE, RUSTIC OR DRAMATIC CONTEMPORARY DESIGN - WHETHER YOU START WITH YOUR PLAN OR OUR PLAN - YOUR NATURAL SPACES DOME HOME HAS NEVER LOOKED BETTER.



Natural Spaces Domes



OUR DOME HOME CAN PROVIDE YOU WITH A TOTALLY NEW EXPERIENCE IN LIVING - A SPACIOUS, OPEN, AIRY ENVIRONMENT.

DESIGN FLEXIBILITY ALLOWS YOU TO HAVE TOTAL FREEDOM OF EXPRESSION IN CREATING MARVELOUS INTERIOR DOME SPACES.

SKYLIGHTS LET THE MOON AND STARS IN AND SHOW CLOUDS DRIFTING BY, LIFTING YOUR SPIRITS EVEN ON THE DULLEST OF DAYS.

IMAGINE A GENTLY CURVED CEILING OVER TWENTY FEET HIGH. YOU LL NEVER AGAIN FEEL BOXED IN, JUST SAFE, COMFORTABLE, AND SNUG.

IT S TIME OUR HOUSES WERE BUILT FOR THE WAY WE LIVE. THE OBSOLETE WAY MAY BE THE EASY WAY TO BUILD TODAY, BUT IT WON T GIVE YOU YOUR MONEY S WORTH TOMORROW.



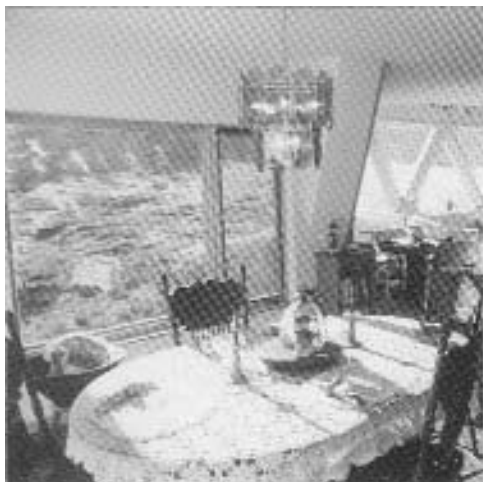
ask the person who owns one

HOW DID YOU KNOW WE WOULD LIVE SO HAPPILY INSIDE THIS SPACE? WHY DIDN'T YOU PREPARE US FOR THE FEELING OF COMPLETE UNION BETWEEN OUR LIVING ROOM WINDOWS AND THE RIVER VIEW?

THE DINING ROOM IS COMPLETELY SEPARATE FROM THE LIVING ROOM, BUT THEY'RE JOINED SO ORGANICALLY BY A WARM CURVED WALL AND WARM FIREPLACE.

THE PATTERNS THE MOONLIGHT MAKES ON THE INSIDE ARE BREATHTAKING.

IT'S A THREE-DIMENSIONAL SHOW PLACE AND NEST, ROLLED INTO ONE. IT'S A JOY TO LIVE HERE.



energy savings

ONE OF THE BIGGEST FACTORS CONTRIBUTED BY THE DOME TO ENERGY SAVINGS, IS THE DOME SHAPE. THE UNIQUE QUALITY OF THE DOME IS THAT BY ELIMINATING THE BOXES CORNERS, ROUNDING THE CUBE SO TO SPEAK, IT ELIMINATES 30% OF THE SURFACE AREA ASSUMING THE SAME FLOOR AREA. WHICH, RIGHT AWAY, REDUCES THE HEAT LOST THRU THE WALLS AND ROOF 30%.

WE'VE TAKEN THE ATTIC SPACE OF THE CONVENTIONAL HOUSE (WHICH YOU PAY TO HAVE BUILT) AND USED IT TO CREATE MORE UPPER FLOOR SPACE ALONG WITH THE HIGH CEILINGED SPACE FOR A GLORIOUS GREAT ROOM.

ANOTHER PLUS FOR OUR DOME IS IN THE FACT IT HAS 60% TO 70% LESS FRAMING MEMBERS IN THE WALLS AND ROOF. THIS CAN CONTRIBUTE AN ADDITIONAL 5%-10% IN ENERGY SAVINGS, A NATURAL SPACES EXCLUSIVE.

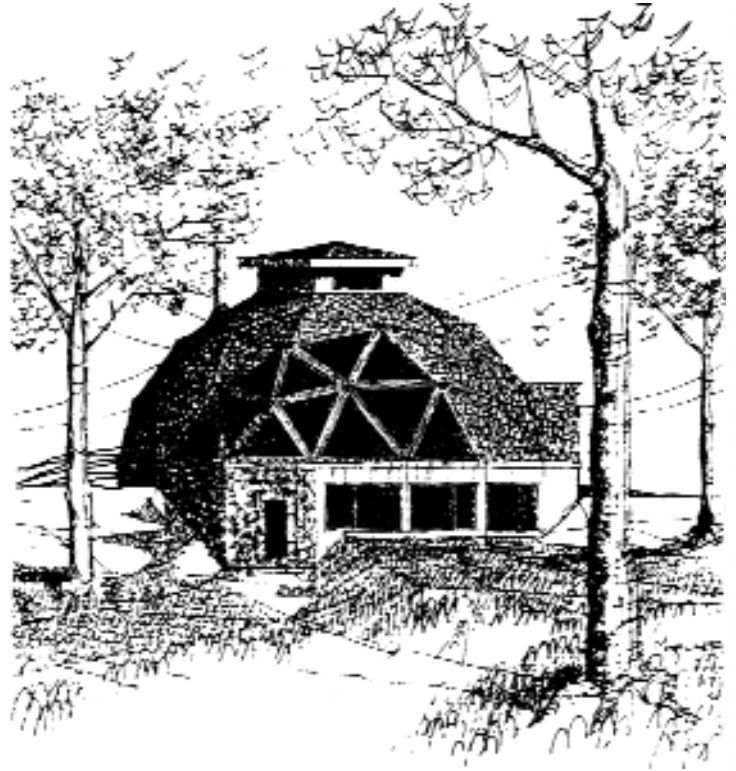
AS WE ADD MORE INSULATION AND TIGHTEN UP OUR WALL/ ROOF SYSTEM, INDOOR AIR QUALITY BECOMES A CRITICAL ISSUE. NATURAL SPACES UNDERSTANDS THIS AND OFFERS A DOME SYSTEM MINIMIZING INDOOR AIR CONTAMINANTS FROM BUILDING MATERIALS.

AS AN EXAMPLE, OUR STANDARD INTERIOR SURFACE OF THE DOME IS MADE FROM NATURAL SPRUCE WOOD. IN THE TYPICAL MODERN HOUSE, WHERE WE'VE ELIMINATED GREASY FOOD COOKING AND TOBACCO SMOKE, THIS WOOD DOES NOT REQUIRE ANY CHEMICAL SEALANTS OR FINISH. IF YOU NEED TO SEAL THIS WOOD, WE SPECIFY A VERY LOW CHEMICAL CONTENT SEALER/FINISH.

WE ALSO WORK WITH THOSE THAT ARE CHEMICALLY SENSITIVE TO SPECIFIC ELEMENTS, CREATING A PERSONALLY HEALTHY CUSTOM DOME ENVIRONMENT.

INDOOR AIR QUALITY CAN BE ENHANCED BY USING FRESH AIR-TO-AIR EXCHANGERS OR, IN COLDER CLIMATES, AN HRV (HEAT RECOVERY VENTILATOR) SYSTEM. THESE SYSTEMS EXHAUST STALE, MOIST AIR, AND TAKE IN CLEAN, DRYER OUTDOOR AIR (ASSUMING YOU HAVE CLEANER, DRIER OUTSIDE AIR).

LET US HELP YOU CREATE A HEALTHY INDOOR ENVIRONMENT. AFTER ALL, THERE WAS A REASON WE CHOSE TO CALL OUR COMPANY NATURAL SPACES DOMES.



healthy homes



air circulation

HEAT RISES. ONE OF NATURE'S LAWS. DURING THE WINTER, WE NEED TO PRODUCE HEAT IN OUR HOMES. CONVENTIONAL HOMES, WITH THEIR HEAT SUPPLY NEXT TO THE FLOOR AND THEIR RETURN DUCT NEXT TO THE FLOOR, HAVE A HARD TIME DEALING WITH THE HEAT SITTING UP AT THE CEILING LEVEL. SO, IT IS USUALLY 80 UP HIGH AND 60 ON THE FLOOR. ALL THOSE SQUARE BOX ROOMS AND AIR THAT DOESN'T LIKE TO MOVE AT RIGHT ANGLES.

THE DOME HAS AN ADVANTAGE WITH ITS ROUND SHAPE. WARM AIR, INTRODUCED AT THE FLOOR AROUND THE OUTSIDE OF THE DOME, FLOWS READILY TO THE TOP OF THE DOME.

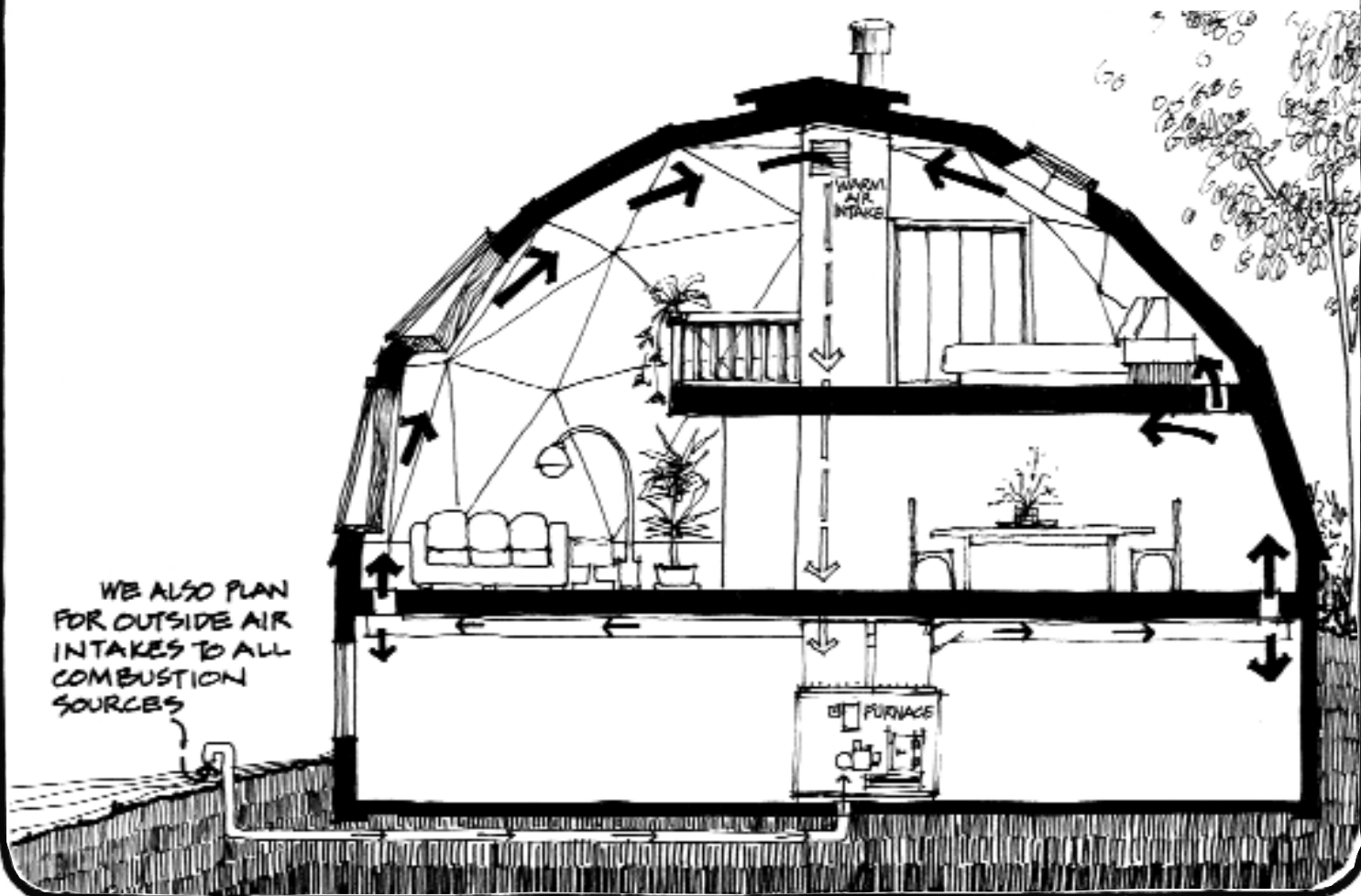
IT WOULD BE NICE IF IT WOULD THEN CIRCULATE AROUND AND UP AND DOWN INSIDE THE DOME BY ITSELF. THAT THEORY DOESN'T TAKE INTO ACCOUNT THE SECOND FLOOR SYSTEM, SKYLIGHTS COOLING OFF THE AIR, CHIMNEYS AND THE LIKE HINDERING

THE AIR FLOW. THE WARM AIR NEEDS SOME HELP TO MOVE AROUND.

NATURAL SPACES DOMES UTILIZES A WARM AIR INTAKE AT THE TOP OF THE DOME CONNECTED TO THE FURNACE AIR HANDLER. THIS EQUALIZES THE TEMPERATURE IN THE DOME WITH DOME OWNERS REPORTING NO MORE THAN 1 TO 2 DEGREE DIFFERENCE BETWEEN THE LOWER FLOOR AND THE LOFT.

IF YOU ARE USING RADIANT FLOOR HEAT, A LARGE CEILING FAN OR AN IN-LINE FAN IN A RETURN AIR DUCT WOULD EQUALIZE THE AIR TEMPERATURES.

OUR DOMES ARE SUPER-INSULATED WITH TIGHT VAPOR BARRIERS AND SUPER LOW INFILTRATION. AN AIR-TO-AIR HEAT OR ENERGY RECOVERY VENTILATOR (HRV OR ERV) WILL PROVIDE A SOURCE OF FRESH MAKE-UP AIR AND ESPECIALLY IMPORTANT IN COLDER REGIONS OF THE COUNTRY, WILL TEMPER INCOMING AIR. AN HRV/ERV WILL



ventilation

wall cavity

AS LEADERS AND PIONEERS IN THE FIELD OF DOME HOME TECHNOLOGY, NATURAL SPACES HAS DEVELOPED A DOME WALL VENTILATION SYSTEM THAT PROVIDES FOR CONTINUOUS NATURAL AIR CIRCULATION OVER THE ENTIRE FIBERGLASS INSULATION SURFACE.

AIR ENTERS AT THE BOTTOM OF THE DOME SHELL THROUGH A FLARED BASE VENT SKIRT WITH SCREENING, RISES AS IT IS WARMED BY THE SUN, AND ESCAPES OUT OF THE TOP LOW PROFILE VENT CUPOLA.

THE AIR BEING VENTED CARRIES WITH IT ANY MOISTURE-LADEN AIR THAT HAS MIGRATED INTO THE WALL CAVITY FROM THE INSIDE OF THE DOME.

STRUTS ARE NOTCHED AND HUBS INSET TO PROVIDE CONTINUOUS AMPLE AIR FLOW

CONCEALED EXTERIOR BASE VENT SYSTEM W/ INSET SCREENING

LOW PROFILE ROOF VENT W/ INSET SCREENING

IF YOU HAVE EVER TRIED CUTTING 4X8 SHEETS OF INSULATION BOARD AND TRIED TO FIT THEM INTO TRIANGULAR SPACES, YOU KNOW YOU CAN'T GET A TIGHT FIT.

VAPOR BARRIERS THAT ARE PUT UP TRIANGLE BY TRIANGLE CREATE A GAP AT EVERY SINGLE JOINT, ALLOWING VAPOR TO EASILY ENTER THE ROOF CAVITY.

THE ONLY KIND OF INSULATION NOT SUBJECT TO THIS PROBLEM IS SPRAYED-IN-PLACE URETHANE. THIS MATERIAL, WHEN PROPERLY APPLIED TO DRY WOOD, ADHERES AND DOES NOT ALLOW VAPOR TO PENETRATE. HOWEVER, THERE ARE OTHER PROBLEM DETAILS TO BE DEALT WITH CORRECTLY.

MOST OTHER DOME COMPANIES IGNORE THE CONDENSATION PROBLEM OR SIMPLY DON'T KNOW IT EXISTS.

ALMOST ALL OF THE BUILDING CODES CALL FOR A VENTED AIR SPACE ON THE COLD SIDE OF THE INSULATION IN ANY CATHEDRAL CEILING. ALL BUILDING CODES REQUIRE VENTILATION OF ATTIC SPACES.

DOME COMPANIES THAT USE RIGID INSULATION, CUTTING IT TO FIT WITHIN THE TRIANGLES, MAY HAVE A SERIOUS CONDENSATION PROBLEM BECAUSE THE INSULATION BOARD DOES NOT FIT TIGHT TO THE OUTSIDE PANEL. THIS LEAVES A PERFECT SPACE FOR VAPOR TO CONDENSE ON THE OUTSIDE PANEL.

condensation

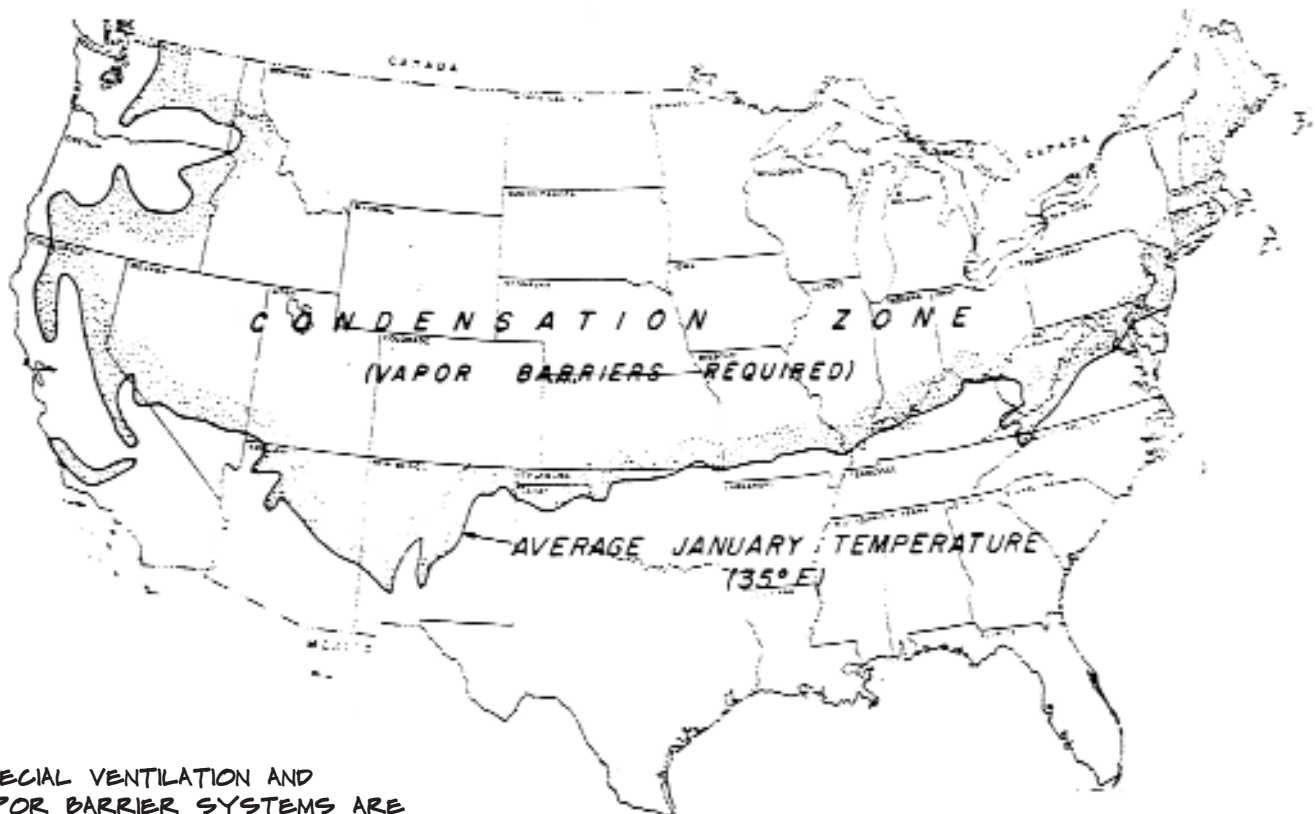
CONDENSATION CAN BE DESCRIBED AS THE CHANGE IN MOISTURE FROM A VAPOR TO A LIQUID. WATER VAPOR WITHIN THE HOUSE CAN MIGRATE THROUGH THE WALL OR CEILING DURING THE HEATING SEASON TO SOME COLD SURFACE WHERE IT CONDENSES, COLLECTING IN THE FORM OF ICE OR FROST. DURING WARM OR SUNNY PERIODS, THE FROST MELTS. WHEN CONDITIONS ARE SEVERE, THIS MELTDOWN IN UNVENTED SPACES MAY DRIP TO THE CEILING BELOW AND DAMAGE THE INTERIOR FINISH. WOOD SHEATHING MAY SWELL UP. INSULATION BECOMES WET AND LOSES RESISTANCE TO HEAT LOSS. THESE PROBLEMS CAN BE REDUCED OR ELIMINATED WHEN PROPER CONSTRUCTION DETAILS ARE USED.

THE CONTROL OF CONDENSATION THRU THE USE OF VAPOR BARRIERS AND VENTILATION SHOULD BE PRACTICED REGARDLESS OF THE AMOUNT OF INSULATION USED.

THE USE OF BOTH INLET AND OUTLET VENTS IN ATTIC AND ROOF SPACES AIDS IN KEEPING THE AIR MOVING AND PREVENTING THE ACCUMULATION OF FROST OR CONDENSATION ON ROOF SHEATHING IN COLD AREAS. DEAD AIR POCKETS IN THE ROOF CAN NORMALLY BE PREVENTED BY GOOD DISTRIBUTION OF INLET VENTS IN THE SOFFIT AREAS. HOWEVER, THERE IS STILL A NEED FOR VAPOR BARRIERS; VENTILATION ALONE, WHEN INSULATION IS USED, DOES NOT PREVENT CONDENSATIONS PROBLEMS.

MAP SHOWING CONDENSATION PROBLEM AREAS

WINTER CONDENSATION PROBLEMS OCCUR WHERE THE AVERAGE TEMPERATURE FOR JANUARY IS 35° OR LOWER. SOME INTERMITTANT PROBLEMS MAY OCCUR IN OTHER AREAS HAVING AVERAGES UP TO 45°.



SPECIAL VENTILATION AND VAPOR BARRIER SYSTEMS ARE NEEDED IN COASTAL REGIONS AND MIXED-HUMID REGIONS

THIS MAP IS FROM A 40-PAGE GOVERNMENT PUBLICATION ON CONDENSATION PROBLEMS

wintertime warmth

BUILDING CODES REQUIRE CERTAIN INSULATION VALUES, CALLED R-VALUES, FOR THE WALLS AND ROOF. THESE ARE NOT THE IDEAL OR THE MAXIMUM R-VALUE-IT IS THE MINIMUM R-VALUE. IN 1974 THEY WERE SAYING YOUR ROOF SHOULD HAVE 6 OF INSULATION WITH AN R-19. CURRENTLY, CODES CALL FOR A MINIMUM R-30 IN THE FAR SOUTH, R-38 IN THE CENTRAL AND NORTHERN STATES, R-49 IN THE EXTREME NORTHERN AREA.

WE OFFER ECONOMICAL, EASY TO BUILD DOME KITS THAT WILL GIVE YOU R-VALUES TO BOAST ABOUT: R-44, R-55, AND R-66.

CERTAINLY READY FOR THE NEXT CENTURY.

MOIST AIR IS
EXHAUSTED THRU
THE VENT CUPOLA

HEAVY DUTY 6 MIL
PLASTIC VAPOR BARRIER

THE NATURAL SPACES DOME SYSTEM WAS DESIGNED BY THE PEOPLE WHO LIVE IN MINNESOTA-NORTHERN MINNESOTA. AS THIS BOOK IS BEING WRITTEN THE TEMP IS 25 BELOW ZERO WITH A 20 MPH WIND. THAT MEANS A WIND CHILL FACTOR OF 76 BELOW ZERO!

YES, WE'RE WRITING THIS FROM OUR DOME OFFICE AND HOME. YES, WE ARE COMFORTABLE EVEN THOUGH OUR DOME WAS BUILT TO THE STANDARDS WE HAD 17 YEARS AGO. WE THINK OUR SYSTEM NOW IS GREATLY IMPROVED FROM THE ONE WE HAD THEN. WE LEARN FROM OUR PAST EXPERIENCES-ONCE WE'VE PROVEN SOMETHING IN THE FIELD, WE MAKE CHANGES.

BUILDING A WARM DOME DOESN'T JUST MEAN MORE INSULATION. IT'S MANY THINGS, LIKE OUR VENTED DOME SHELL, INSULATION PLACEMENT, CAULKING DETAILS, TYVEK HOUSE WRAP, 6 MIL PLASTIC VAPOR BARRIER, FOUNDATION WALL INSULATION, TRIPLE AND FOUR PANE WINDOWS, INTERNAL HEAT RECIRCULATION, AND OTHERS YOU WILL READ ABOUT LATER IN THIS BOOK.

OUR WARM DOME IS ECONOMICAL TO BUILD. WE DON'T WANT YOU SITTING IN YOUR WARM DOME WORRYING ABOUT HOW YOU ARE GOING TO PAY THE MORTGAGE. WE WANT YOU SITTING IN YOUR WARM NATURAL SPACES DOME CHUCKLING ABOUT YOUR NEIGHBOR IN HIS COLD, CONVENTIONAL, EXPENSIVE HOUSE.

VENTED AIR
SPACE

INTAKE
VENT

DETAIL FOR
VAPOR BARRIER

LOWER WALL:

R-22 MIN

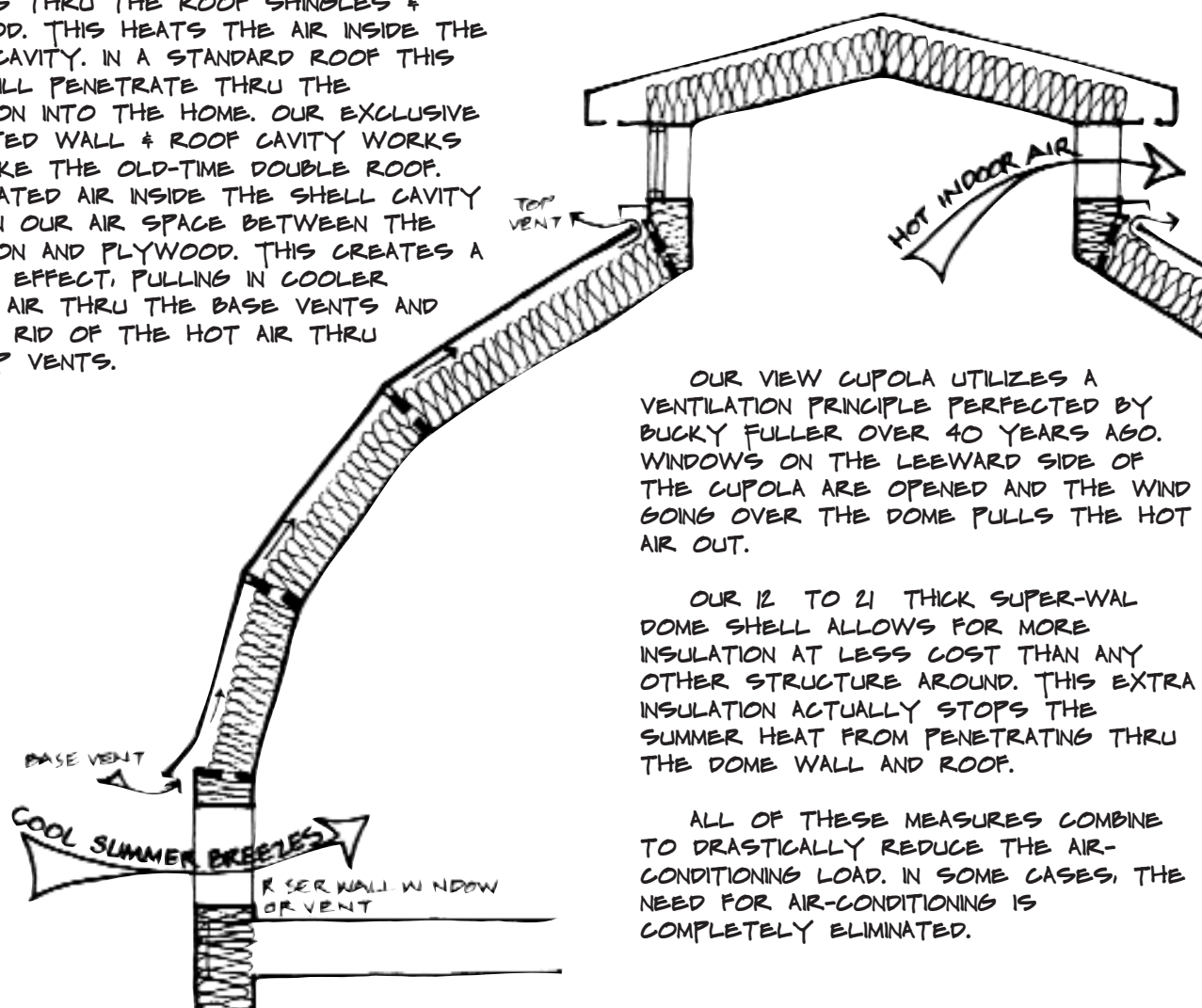
R-28 AVG

R-40 OPT.

UNDER THE SLAB INSULATION AND
6 MIL PLASTIC VAPOR BARRIER

summertime cooling

IN THE SUMMER, THE SUN'S HEAT RADIATES THRU THE ROOF SHINGLES & PLYWOOD. THIS HEATS THE AIR INSIDE THE SHELL CAVITY. IN A STANDARD ROOF THIS HEAT WILL PENETRATE THRU THE INSULATION INTO THE HOME. OUR EXCLUSIVE VENTILATED WALL & ROOF CAVITY WORKS JUST LIKE THE OLD-TIME DOUBLE ROOF. THE HEATED AIR INSIDE THE SHELL CAVITY RISES IN OUR AIR SPACE BETWEEN THE INSULATION AND PLYWOOD. THIS CREATES A CHIMNEY EFFECT, PULLING IN COOLER GROUND AIR THRU THE BASE VENTS AND GETTING RID OF THE HOT AIR THRU THE TOP VENTS.



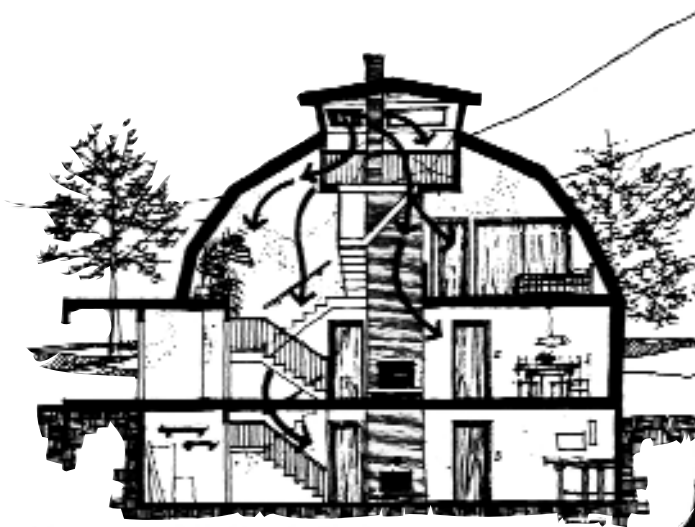
OUR VIEW CUPOLA UTILIZES A VENTILATION PRINCIPLE PERFECTED BY BUCKY FULLER OVER 40 YEARS AGO. WINDOWS ON THE LEEWARD SIDE OF THE CUPOLA ARE OPENED AND THE WIND GOING OVER THE DOME PULLS THE HOT AIR OUT.

OUR 12 TO 21 THICK SUPER-WAL DOME SHELL ALLOWS FOR MORE INSULATION AT LESS COST THAN ANY OTHER STRUCTURE AROUND. THIS EXTRA INSULATION ACTUALLY STOPS THE SUMMER HEAT FROM PENETRATING THRU THE DOME WALL AND ROOF.

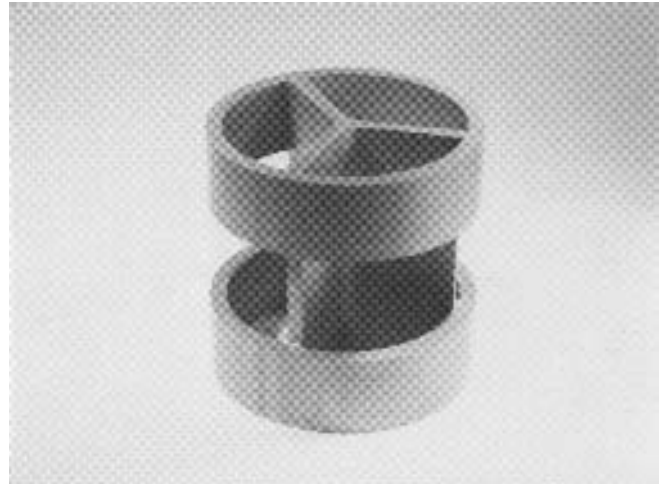
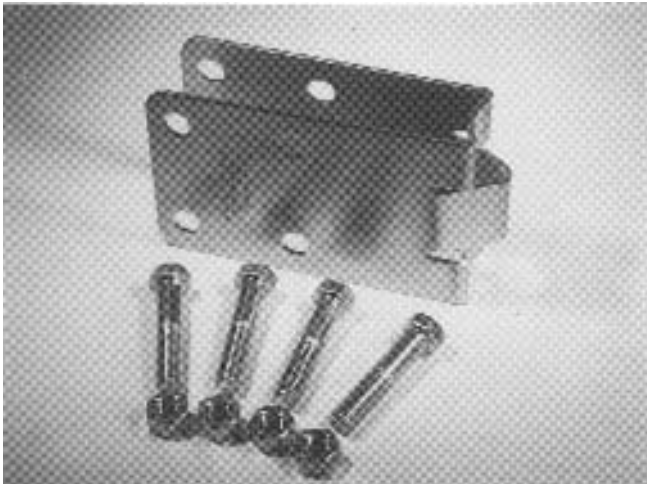
ALL OF THESE MEASURES COMBINE TO DRASTICALLY REDUCE THE AIR-CONDITIONING LOAD. IN SOME CASES, THE NEED FOR AIR-CONDITIONING IS COMPLETELY ELIMINATED.

IF YOU ARE IN A CLIMATE OR SITE THAT DOES NEED AIR-CONDITIONING, OUR VIEW CUPOLA WITH WINDOWS MAKES FOR AN EASY INSTALLATION OF A WINDOW TYPE AIR-CONDITIONER. BECAUSE OF OUR SUPER-INSULATION AND THE IDEA THAT COOL AIR DROPS, IT'S AMAZING WHAT A 5,000-10,000 BTU UNIT WILL ACCOMPLISH.

OPEN STAIRWAYS, OPEN LOFTS, RETURN AIR DUCTS, REVERSIBLE CEILING FANS, BRICK FIREPLACE MASS AND OTHER SIMILAR FEATURES CONTRIBUTE TO MAKING THE AIR-CONDITIONER WORK EFFECTIVELY AND EFFICIENTLY.



super-loc connection system



AT THE HEART OF THE NATURAL SPACES DOME SYSTEM IS OUR PATENTED CONNECTION HARDWARE WHICH WE CALL THE SUPER-LOK.

INVENTED IN 1978, IT WAS THE ANSWER TO SIX YEARS OF DOME BUILDING USING INADEQUATE WOOD PLATES, METAL BRACKETS, AND PANELIZED SYSTEMS.

THE SLEEVE IS MADE FROM VERY HEAVY GAUGE STEEL WITH EXTRA THICK ZINC PLATING TO MAKE IT RUSTPROOF.

IN CONNECTING THE SLEEVE TO THE WOOD STRUT, ANYTHING LESS THAN FOUR 1/2 BOLTS JUST WOULDN'T DO TO SATISFY OUR STRINGENT ENGINEERING REQUIREMENTS. AGAIN, THE BOLTS AND NUTS ARE ZINC PLATED.

WHAT WE WERE LOOKING FOR WAS A CONNECTOR THAT WAS SELF-ALIGNING AND SO SIMPLE TO PUT TOGETHER THAT ANY DUMMY-SORRY, THAT SHOULD BE ANY NOVICE DOME BUILDER COULD DO IT.

WE DIDN'T WANT YOU TO HAVE TO DO ANY OF THE ASSEMBLY OF THE STRUT HARDWARE UPON THE SCAFFOLDING.

WITH OUR SYSTEM ALL YOU DO IS SLIP THE SLEEVE TONGUE INTO THE HUB SLOT AND POUND A HARDENED, ZINC PLATED BOLT PIN IN PLACE, SECURELY LOCKING THE TWO TOGETHER. THAT'S IT-NO COMING BACK TO TIGHTEN, NO RE-ALIGNING, NO ADJUSTING.

THE NEXT STEP IS JUST MOVING ON TO THE NEXT STRUT.

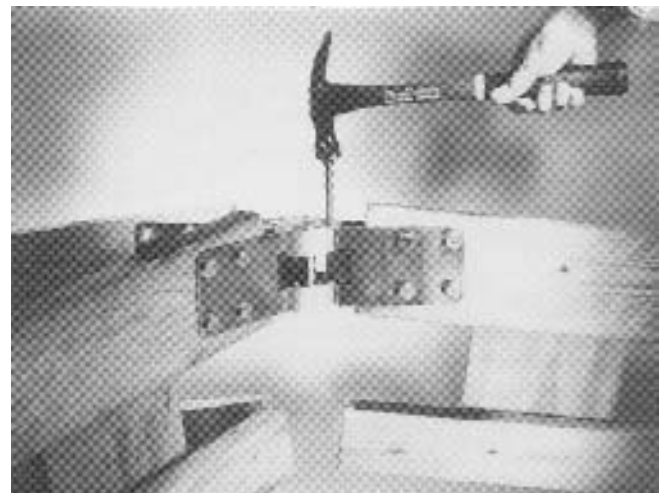
WORKING WITH OUR STRUCTURAL ENGINEER AND OUR METAL FABRICATOR, WE CAME UP WITH OUR UNIQUE HUB DESIGN.

THE ENTIRE HUB IS A ONE PIECE, VERY HIGH STRENGTH, ALUMINUM EXTRUSION.

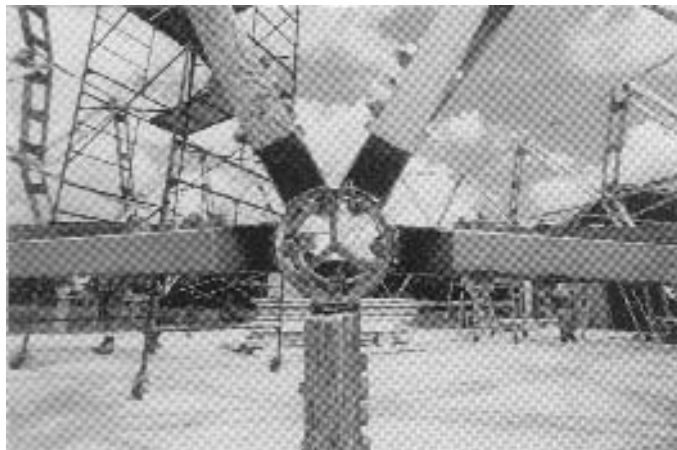
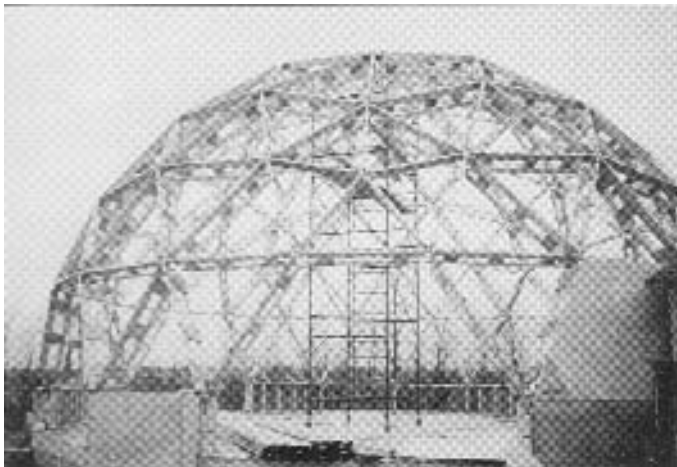
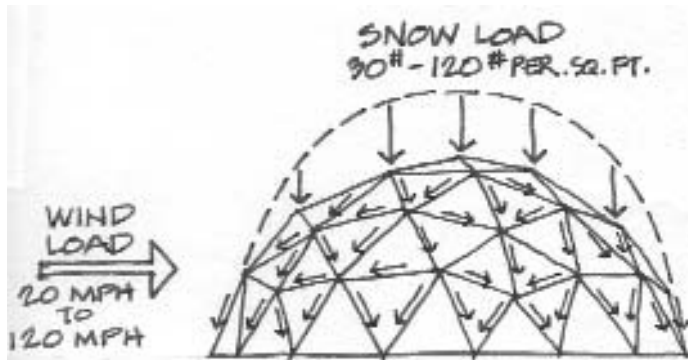
THE TONGUE FROM THE SLEEVE FITS ONTO THE SLOT AROUND THE PERIMETER OF THE HUB.

HAVING SQUASHED VARIOUS PIPE HUBS DURING TESTING, WE CAME UP WITH INTEGRAL REINFORCING SPOKES TO STRENGTHEN THE HUB. IT NOW COULD TAKE EXTREME PRESSURE FROM THE STRUTS-BOTH PULLING AND PUSHING.

SO SURE WERE WE THAT WE HAD A FANTASTIC DOME CONNECTION SYSTEM, WE OBTAINED A PATENT, #4, 262, 461.



THE NEED FOR A SUPER-STRONG CONNECTION DEVICE FOR DOMES BECOMES EVIDENT IN EXAMINING HOW THE DOME FRAMEWORK REACTS TO LOADS:



THE DOME FRAMEWORK TRANSFERS ALL OF THE ROOF LOADS DIRECTLY TO THE BASE OF THE DOME. THESE LOADS GET ADDED TO EACH OTHER ON THE WAY DOWN. THE LOWER PART OF THE DOME HAS TO BE ABLE TO TAKE 6000-8000 POUNDS OF PRESSURE AT EACH LOWER CONNECTION POINT. THIS MEANS THAT THE WEAKEST LINK IN THE CHAIN HAS TO BE ABLE TO TAKE THIS PRESSURE.

OUR SUPER-LOK CONNECTOR HAS BEEN TESTED INDEPENDENTLY AND BY ITSELF WILL WITHSTAND OVER 14,000 POUNDS OF TENSION. HOWEVER, TESTS WERE RUN WITH OUR SLEEVE MOUNTED ON THE #1 GRADE SOUTHERN PINE STRUT. THIS BETTER RESEMBLES ACTUAL LOAD SITUATIONS.

THE TEST TRIED TO PULL THE WOOD STRUT FROM THE HUB. THE WOOD SPLIT AT OVER 8,000 POUNDS BUT DID NOT ACTUALLY COME APART. OUR SLEEVE HAS FOUR 1/2 BOLTS CONNECTING IT TO THE STRUT. ONE OF OUR COMPETITORS USES 2 BOLTS IN ATTACHING A BRACKET TO THEIR STRUT. THEY USE FIR LUMBER WHICH IS NOT AS STRONG AS SOUTHERN PINE. EVEN THOUGH THEY USE 5/8 BOLTS, OUR CONNECTION SYSTEM WOULD STILL HOLD AT LEAST 30% MORE STRESS.

WE HAVE DONE EXTENSIVE COMPUTER ENGINEERING ANALYSIS ON OUR DOME WITH OUR STRUCTURAL ENGINEERS. OUR SYSTEM SURPASSED THE STRUCTURAL NEEDS FOR 10 DIFFERENT LOADING CRITERIA THE WORST OF WHICH WERE:

- 80# SNOW LOAD COMBINED WITH 80 MPH WIND
- 50# SNOW LOAD COMBINED WITH 90 MPH WIND
- 80# SNOW LOAD COMBINED W/ZONE 4 EARTHQUAKE
- 120 MPH BASIC WIND

THIS COMBINATION LOADING CREATES WHAT IS CALLED ECCENTRIC LOADING WHERE ALL OF THE NORMAL ROOF LOAD IS PUT ON ONLY 1/2 OF THE DOME. AGAIN WE SURPASSED THE STRUCTURAL NEEDS.

THE NATURAL SPACES CONNECTOR IS THE STRONGEST DOME CONNECTOR ON THE MARKET.

OUR COMPETITORS HAVE BEEN HEARD TO SAY OUR SYSTEM IS OVER ENGINEERED - WE THINK YOU DESERVE NOTHING LESS.

super-wal

the double strut system

MOST OTHER DOME COMPANIES OFFER 2X4 STRUTS AS STANDARD OR AT BEST 2X6 AS STANDARD. VERY FEW WILL EVEN OFFER 2X8 AS AN OPTION. WHY? PROBABLY BECAUSE IT'S EASY AND CHEAP. FOR THEM, THAT IS.

WE LEARNED SEVERAL HUNDRED DOMES AGO THAT A 2X6 DOME IS NOT ENOUGH.

WHEN NATURAL SPACES WAS FORMED IN 1978, WE HAD LEARNED FROM SIX YEARS OF DOME BUILDING AND THE ENERGY CRISIS THAT OLD BUILDING METHODS WERE NOT GOING TO CARRY US INTO THE 21ST CENTURY.

SO, WE INVENTED THE SUPER-WAL DOUBLE STRUT SYSTEM PROVIDING A TRUE SUPER INSULATED DOME SYSTEM.

WHEN YOU BUY A DOME SHELL SYSTEM FROM US, YOUR SUPER-WAL STRUTS COME PRE-ASSEMBLED WITH SLEEVES ATTACHED READY TO ERECT.

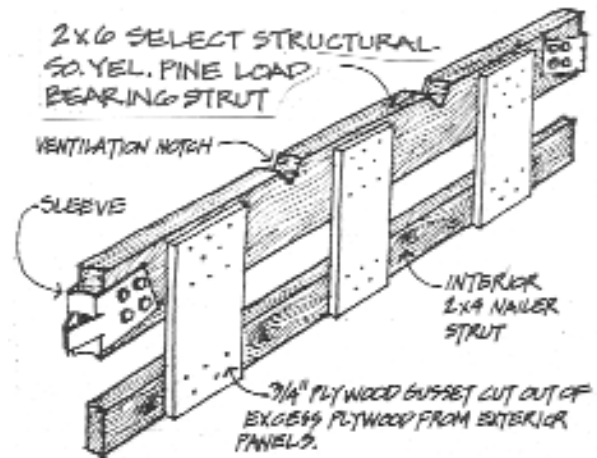
WE LEARNED HOW TO MANUFACTURE A 15, 18 OR 21 WIDE STRUT FOR THE SAME PRICE AS OUR 2X10 STRUT. WE LEARNED HOW TO PRODUCE AND SELL THEM FOR LESS MONEY THAN OUR COMPETITORS 2X6 DOME SYSTEM.

WHY DO YOU NEED SUCH A THICK STRUT? TO ADD MORE INSULATION AND PROVIDE FOR WALL CAVITY AIR VENTILATION.

IS THERE A MAXIMUM R VALUE OR A POINT OF DIMINISHING RETURNS? THE ADDITIONAL INVESTMENT YOU ARE MAKING IN THE SUPER-WAL IS SO SMALL THAT YOU GET A FANTASTIC RETURN. IF ANYONE CAN PREDICT WHAT THE WORLD ENERGY PICTURE WILL BE LIKE 10, 25 OR 50 YEARS FROM NOW, WE'LL TELL YOU EXACTLY WHAT THE PAYBACK IS. JUST THINK BACK 20 YEARS AGO. NOW, DON'T YOU WANT SOMETHING MORE THAN A 2X6 DOME?

WE ALSO MADE OUR SUPER-WAL SYSTEM EASY TO ERECT. BEING PRE-ASSEMBLED, YOU DON'T HAVE TO GO BACK AND ADD ANYTHING OR TIGHTEN OR ALIGN ANYTHING.

ONCE YOU POUND THE BOLT PIN IN PLACE, YOUR FRAMEWORK IS LOCKED RIGIDLY TOGETHER. YOU ERECT YOUR DOUBLE-STRUT DOME FRAMEWORK IN ONE DAY IN ONE OPERATION.



for superinsulating

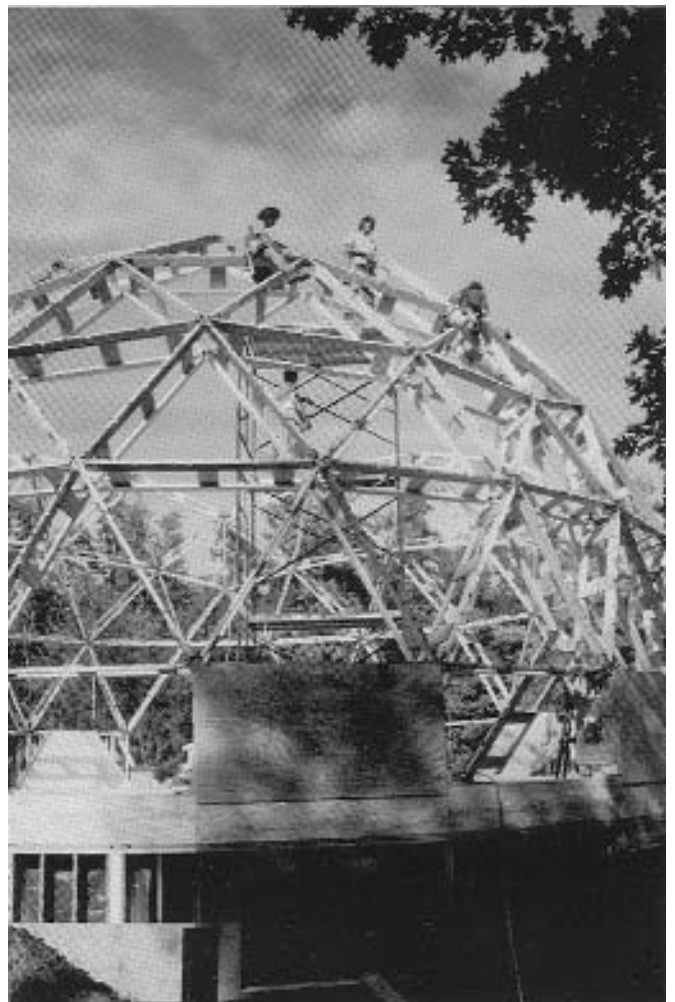
BECAUSE WE USE SAFE, ECONOMICAL, FIBERGLASS BATT INSULATION, WE HAVE DEVELOPED STANDARD SUPER-WAL SIZES:

SUPERWAL	INSULATION	AIR SPACE	R-VALUE
12	9 1/2	2 1/2	34
15	6 1/4 & 6 1/4	2 1/2	44
18	6 1/4 & 9 1/2	2 1/4	55
21	9 1/2 & 9 1/2	2	66

TWO 6 BATTS ARE CHEAPER THAN ONE 12 BATT. WE NOTCH OUR STRUTS AND SET BACK OUR SLEEVE TO ALLOW AIRFLOW BETWEEN PANELS.

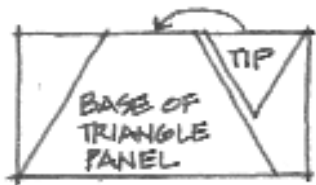
OUR SUPER-WAL SYSTEM INCLUDES THE RISER WALL AND THE VIEW CUPOLA. IT'S A TOTAL SUPERINSULATED SHELL FROM THE FLOOR UP.

OUR SUPER-WAL DOUBLE STRUT SYSTEM IS NOT A NEW EXPERIMENTAL SYSTEM. WE'VE BEEN BUILDING IT FOR YEARS. IT'S PRACTICAL AND ECONOMICAL TO BUILD. BEST OF ALL, IT WILL SAVE YOU THOUSANDS OF DOLLARS IN YOUR FUTURE FUEL BILLS, PROVIDING YOU COMFORT OF MIND AND BODY.



exterior panels

A NATURAL SPACES DOME USES 3/4 EXTERIOR GRADE PLYWOOD FOR THE EXTERIOR TRIANGULAR SHEATHING PANELS. AT A TIME WHEN OTHER DOME COMPANIES WERE FIGURING OUT HOW TO USE THINNER SHEATHING, WE WERE LOOKING AT THE QUALITY OF OUR SYSTEM. 3/4 PLYWOOD ALLOWS US TO FREE-SPAN EACH TRIANGLE WITHOUT REQUIRING EXPENSIVE AND TIME-CONSUMING BRACING BETWEEN THE STRUTS.



THIS IS HOW WE GET A FULL TRIANGLE OUT OF EACH SHEET OF PLYWOOD

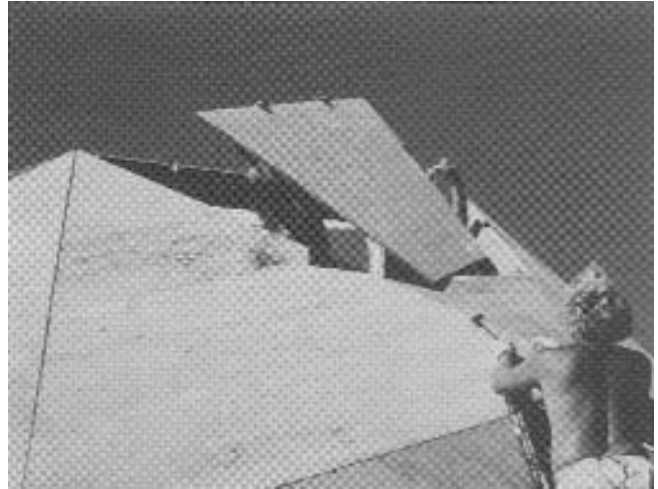
OUR TRIANGLES ARE CUT FROM 4 X8 SHEETS THAT HAVE A TONGUE AND GROOVE EDGE ON EACH LONG SIDE. IT'S A PLYWOOD CALLED UNDERLAYMENT GRADE, WHICH IS READILY AVAILABLE FROM ANY LUMBER YARD.

WHEN THE TWO PIECES OF THE TRIANGLE PANEL COME TOGETHER, THERE IS A TONGUE AND GROOVE EDGE ALONG THE JOINT LINE. THIS CREATES A VERY STIFF JOINT THAT DOES NOT REQUIRE ADDITIONAL BRACING BEHIND IT, EXCEPT IN VERY EXTREME STRUCTURAL LOADING SITUATIONS.

WE THEN USE THE REST OF THE PLYWOOD SHEET TO MAKE OUR BUSSET PLATES FOR OUR SUPER-WAL STRUT, THEREBY ALMOST COMPLETELY ELIMINATING ANY SCRAP.

OTHER DOME COMPANIES USE 1/2 PLYWOOD OR 1/2 CHIPBOARD. IN ORDER TO USE 1/2 PLYWOOD DOME TRIANGLES, YOU HAVE TO ADD 2X4 BRACES AT 16 O.C. TO SUPPORT THE ROOF LOAD. ALL OF THESE BRACES CREATE ADDITIONAL AREAS FOR HEAT LOSS TO OCCUR DIRECTLY THRU THE FRAMING. THEY ALSO CREATE DEAD AIR SPACES AND MAKE IT ALMOST IMPOSSIBLE TO VENTILATE THE WALL-ROOF CAVITY. IN OTHER HUB AND STRUT DOME SYSTEMS THIS ADDITIONAL BRACING ADDS TREMENDOUSLY TO THE TIME INVOLVED IN PUTTING UP THE FRAME, NOT TO MENTION THE ADDITIONAL COSTS WHICH CAN BE SIGNIFICANT.

CHIPBOARD OR WAFERBOARD ALSO HAS EXPANSION PROBLEMS WITH MOISTURE PRESENT.



insulation

FIBERGLASS BATT INSULATION, WE HAVE FOUND, IS THE SAFEST AND MOST ECONOMICAL TYPE FOR OUR DOMES.

SOME DOME COMPANIES CLAIM THEY CAN GET AN R-35 USING 2X4 CONSTRUCTION. BUILDING CODES ALLOW ONLY A MAXIMUM R-VALUE OF 6.25/INCH FOR FIGURING FOAM-INSULATING VALUES. MULTIPLY THAT TIMES 3 1/2 THICK STRUTS AND YOU GET AN R-22.

OTHER COMPANIES ALSO SAY THAT THERE ARE VASTLY DIMINISHING RETURNS BEYOND A CERTAIN R-VALUE. CURRENTLY, THE MINIMUM CEILING R-VALUE FOR THE NORTHERN TIER OF THE U.S. IS R-38. 25 YEARS AGO THESE SAME AUTHORITIES WERE SUGGESTING AN R-19 CEILING. HOW WILL IT CHANGE IN THE FUTURE? WHY BUILD A DOME HOME WITH 2/4 S OR 2X6 S THAT STARTS OUT 25 YEARS BEHIND THE TIMES?!

YOU ACTUALLY PAY SUBSTANTIALLY LESS FOR A NATURAL SPACE DOME WITH AN R-44 VALUE THAN YOU DO FOR THE COMPETITION S DOME WITH AN R-30!

WE OFFER INDUSTRIAL TYPE DENSE BATTS IN VARIOUS THICKNESSES OF 6 , 8 AND 9 1/2 . WE PUT IN 2 LAYERS CREATING 12 , 16 AND 19 . WE ALSO OFFER WIDTHS OF 60 , 72 AND 96 . THIS ALLOWS FOR ONE-PIECE TRIANGLES WITH NO SPLICES AND QUICKER INSTALLATION.

OTHER INSULATION TYPES ARE:

SPRAYED URETHANE FOAM- DOES NOT REQUIRE CONDENSATION VENTILATION IF DONE PROPERLY. BECAUSE OF HIGH INSTALLED COST, THIS TYPE IS USUALLY USED FOR LARGER, COMMERCIAL DOMES.

RIGID INSULATION BOARD- THIS TYPE WILL WORK ONLY IF PROVISIONS ARE MADE FOR AT LEAST 1 1/2 OF VENTILATION SPACE BETWEEN THE OUTSIDE SHEATHING AND THE INSULATION. ITS R-VALUE IS TWICE THAT OF FIBERGLASS BUT ITS COST IS FOUR TIMES GREATER

CELLULOSE, KYNENE , LAMB S WOOL, NATURAL COTTON ARE SOME OF THE OTHER INSULATIONS CURRENTLY AVAILABLE. WE CAN HELP YOU FIGURE OUT WHAT S BEST FOR YOU.



roofing

THE DOME IS ESSENTIALLY ALL ROOF. LEAKY DOMES ARE CAUSED BY INCORRECT ROOFING APPLICATIONS AND POORLY DESIGNED AND INSTALLED SKYLIGHTS. THE NATURAL SPACES COMPLETE DOMES BUILDING SYSTEM INSURES A WATERTIGHT AND LEAK FREE HOME FOR YEARS TO COME.

OUR ILLUSTRATED CONSTRUCTION MANUAL SHOWS YOU OR YOUR BUILDER ROOFING TECHNIQUES THAT WE HAVE PERFECTED OVER THE LAST 25 YEARS IN THE DESIGN AND CONSTRUCTION OF SEVERAL HUNDRED DOMES.

OUR EXPERIENCE IS YOUR GAIN.



MOST OF THE EXTRA TIME ROOFING A DOME IS INVOLVED IN SETTING UP THE LADDERS AND SCAFFOLDING AND THEN IN MOVING MATERIALS AND PEOPLE AROUND.

WE SHINGLE OUR DOMES TRIANGLE BY TRIANGLE. STARTING AT THE BOTTOM POINT UP TRIANGLES, THE SHINGLES ARE CUT SHORT OF THE PANEL EDGE. THEN THE POINT DOWN TRIANGLES ARE DONE OVERLAPPING THE TRIANGLE BELOW BY 5, ALLOWING FOR SECURE NAILING AND GOOD SEAL DOWN.

ANOTHER SHINGLING TYPE IS THE WRAP METHOD, WHICH ONLY WORKS ON THE LOWER PORTION OF HIGH PROFILE DOMES. THE TOP PORTIONS HAVE TO BE DONE IN TRIANGLES.

OUR CURB-MOUNTED SKYLIGHTS WITH 6 FLASHING EXTENSIONS ARE AN INTEGRAL PART OF OUR COMPLETE WATERTIGHT ROOF SYSTEM. OTHER SKYLIGHTS COME WITH ONLY A 1 1/2 TO 2 FLASHING-BARELY ENOUGH TO COVER THE SHINGLES. OUR FLASHINGS ARE ENAMELIZED ALUMINUM OR PVC COATED ALUMINUM SO YOU NEVER HAVE TO REPAINT THEM. WE OFFER THEM IN 15 COLORS TO BLEND WITH YOUR SHINGLES AND MATCH YOUR TRIM.

EXTENSIVE USE OF ICE AND WATER-SHIELD MEMBRANES, METAL BASE FLARED DRIP EDGES, OVERSIZED DRIP AND ROOF EDGE FLASHINGS ARE OTHER WAYS WE ENSURE A LONG LASTING LEAK FREE DOME HOME.

THE VAST MAJORITY OF OUR DOMES ARE SHINGLED WITH 30-50 YEAR DIMENSIONAL ASPHALT SHINGLES. WE DO NOT USE 3-TAB TYPE ASPHALT SHINGLES-THEY DO NOT WORK ON A DOME.

WE SHINGLE TRIANGLE BY TRIANGLE WITH A 6" OVERLAP OF THE LOWER TRIANGLE BY THE UPPER TRIANGLE. WE DO NOT USE OR ALLOW RIDGE CAPS ON ANY OF THE JOINTS. WE DO NOT HAVE LEAKS. PERIOD.

REINKE ALUMINUM SHAKES ARE ANOTHER OPTION. THEY HAVE A LIMITED LIFETIME WARRANTY AND COME IN 11 COLORS AND REAL COPPER. REAL CEDAR SHAKES OR SHINGLES CAN BE USED IF YOU HAVE AN EXPERIENCED ROOFER WHO HAS APPLIED THEM BEFORE.

THE DOME AT RIGHT HAS AN ELASTOMERIC LIQUID ROOFING SYSTEM. TEXTURE CAN BE ADDED TO THIS SYSTEM. OUR NATURAL SPACES DOME, BECAUSE IT IS VENTILATED UNDER THE ROOFING PLYWOOD AND USES TOUCH-SANDED PLYWOOD, IS IDEALLY SUITED FOR THIS APPLICATION.



riser walls

OUR BASIC DOME SHELL PACKAGE INCLUDES RISER WALLS IN THE FOLLOWING HEIGHTS:

MODEL 475/625 HIGH	SPECIAL 4 1/8
MODEL 950/1250 LOW	45 HIGH
MODEL 950/1250 HIGH	28 HIGH
MODEL 1500/1700 LOW	45 HIGH
MODEL 1600/1800 MID	28 HIGH

WE CAN SUPPLY RISER WALLS IN VARYING HEIGHTS UP TO 48 HIGH. WE WILL WORK OUT THE CORRECT HEIGHT IN CONJUNCTION WITH YOUR PARTICULAR PLAN. RISERS DETERMINE EXTENSION ARCH HEIGHT, SECOND FLOOR HEIGHT AND MAIN FLOOR WINDOW HEIGHT.

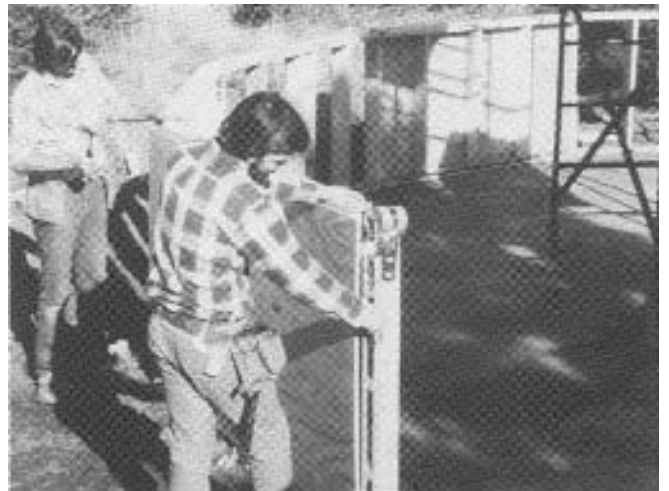
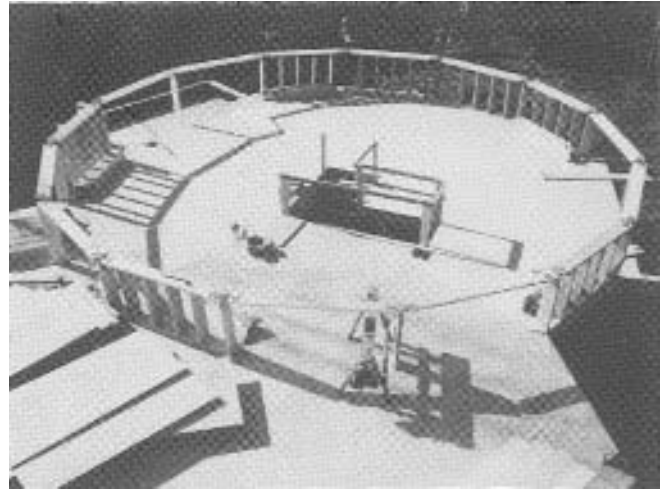
WE DON'T LIKE TO WASTE MATERIAL. OUR RISER WALL INCORPORATES THE FIRST HORIZONTAL ROW OF STRUTS AS ITS TOP PLATE. BECAUSE OUR PLYWOOD SHEATHING RUNS DOWN THE FACE OF THE RIM JOIST, WE DON'T NEED AN OUTSIDE BOTTOM PLATE. ON A 40' DIAM. DOME THIS SAVES YOU 240 LIN. FT. OF LUMBER.

OUR CORNER RISER STRUT HAS A SLEEVE STRUCTURALLY ATTACHING IT TO THE DOME ABOVE.

OUR SUPER-WAL SYSTEM USES THE STRUT THICKNESS AS THE RISER WALL THICKNESS. HERE AGAIN, WE USE INEXPENSIVE 2X4 STUDS ON THE OUTSIDE AND INSIDE TO SAVE MONEY. YOU THEN HAVE A DOUBLE WALL RISER SUPERINSULATED FOR ENERGY EFFICIENCY. (THE PICTURE SHOWS A 2X6 RISER FOR A GARAGE DOME).

ON OUR 26/29 MODELS 475/625 WE HAVE ALTERED THE DOME GEOMETRY AND CREATED A UNIQUE TRAPEZOID SHAPED RISER WALL. THE LOW POINT IS 4' AND THE HIGH POINT IS 8'. ON THESE SMALLER DOMES THIS PROVIDES A VERTICAL WALL FOR LESS EXPENSIVE CONVENTIONAL WINDOW. THIS ALSO HAS THE ADVANTAGE OF PROVIDING A MUCH LARGER LOFT AREA WITH GREATER HEADROOM THAN IS NORMALLY FOUNDING A STANDARD 26/29 DOME.

THIS ALTERED GEOMETRY ALSO PROVIDES TWO HIGH EXTENSION OPENINGS DIRECTLY OPPOSITE EACH OTHER. THE 29 DOME AT RIGHT CAN EASILY BE DEVELOPED INTO A THREE BEDROOM HOME WITH 1500 SQ. FT.



THE DRAWING AT RIGHT SHOWS A 36 LOW PROFILE MODEL 950 WITH AND WITHOUT A 36 RISER. IN THIS CASE IF YOU WANT A USABLE LOFT, YOU HAVE TO ADD A RISER WALL. THE 40 DIAM. LOW PROFILE WOULD ADD ABOUT 2' OF HEIGHT TO THIS DRAWING.

THE HEIGHT OF THE RISER WILL ALSO DETERMINE THE HEIGHT OF THE EXTENSION. A 36 HIGH PROFILE DOME HAS 6'-8" BETWEEN HORIZONTAL STRUT ROWS WHICH IS TOO LOW TO FIT A STANDARD DOOR WITH FRAMING. SO, YOU NEED A RISER WALL.

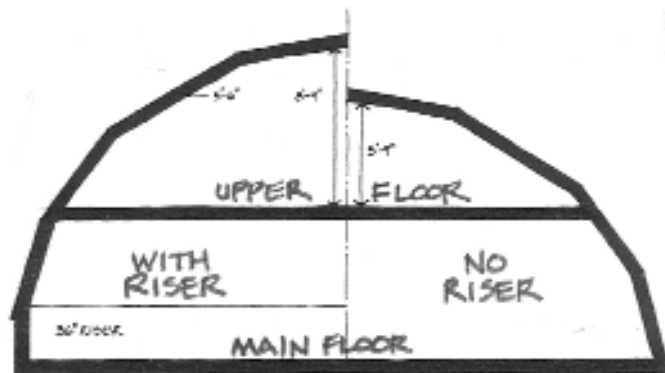
YOU WANT TO ALSO LINE UP THE SECOND FLOOR FRAMING SO THAT IT TIES INTO THE SECOND HORIZONTAL STRUT BAND AND THIS REQUIRES A RISER (HEIGHT DEPENDS ON DOME).

IF YOU ARE BUILDING A LOW PROFILE DOME AND ARE USING A RISER WALL HIGHER THAN 42", WE SUGGEST YOU CONSIDER ADDING A BAND OF TRIANGLES INSTEAD, MAKING IT A HIGH PROFILE DOME. AS SHOWN AT RIGHT, A COMPARABLE BAND OF DOME TRIANGLES IS MORE EFFICIENT THAN A CONVENTIONALLY FRAMED WALL. BECAUSE FRAMING LUMBER HAS A MUCH LOWER R-VALUE THAN INSULATION, THE MORE FRAMING, THE MORE HEAT IS LOST.

IF YOU'RE PLANNING TO BUILD A DOME ON AN 8' RISER WALL, IT JUST WON'T LOOK RIGHT; BESIDES, WE THINK YOU WANT A DOME HOME NOT A DOME-CAPPED ROUND HOUSE.

ANOTHER USE OF THE RISER WALL IS FOR THE INSERTION OF CONVENTIONAL TYPE AWNING OR CASEMENT WINDOWS TO PROVIDE VENTILATION. MOST AWNING WINDOWS WOULD REQUIRE A RISER HEIGHT OF 26" TO 28" AS THEY ARE ABOUT 24" HIGH.

WE LIKE TO USE THE TRIANGLE WINDOWS FOR VIEW WINDOWS BECAUSE THEY DON'T HAVE ANY SCREENS, BEING A FIXED UNIT, SCREENS EVEN WHEN NEW, RESTRICT UP TO 50% OF YOUR VIEW. BY LACING AN AWNING WINDOW WITH SCREEN IN THE RISER, YOU ARE NOT LOOKING OUT OF IT FOR VIEW, BUT ARE USING IT FOR VENTILATION AND LIGHT.

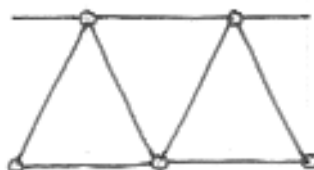


COMPARABLE 8' X 16' WALL SECTIONS



CONVENTIONAL
STUDS @ 16" O.C.

19 STUDS @ 8'



DOME WALL
8 STUDS @ 8'

60% LESS MATERIAL!



extensions

BY EXTENDING A PARTICULAR AREA OF THE DOME, YOU CAN GAIN SQUARE FOOTAGE WHERE IT IS MOST NEEDED. INSTEAD OF HAVING TO GO TO THE NEXT LARGER SIZE DOME TO MAKE YOUR PLAN WORK, SIMPLE EXTENSIONS MAY BE YOUR ANSWER.

EXTENSIONS ARE MADE UP OF A SERIES OF 2X8 OR DOUBLE 2X4 PRE-FABRICATED ARCHES SPACED 24" APART. THE TOP AND SLANTED SIDES ARE SHINGLED WHILE THE STRAIGHT PART MATCHING THE HEIGHT OF THE RISER IS SIDED.

THE SHAPE OF THE ARCHES SHOULD MATCH THE OPENING IN THE DOME SHELL. HOWEVER, WE HAVE ALTERED THIS TRADITIONAL SHAPE TO ACCOMMODATE SPECIAL DESIGN FEATURES SUCH AS SIDE DOOR ENTRIES.

EXTENSIONS ARE PUT ON TO CREATE A FLAT END WALL FOR EASY INSTALLATION OF CONVENTIONAL DOORS AND WINDOWS. THE END WALL IS USUALLY SET BACK 2' OR 3' TO PROVIDE A RAIN SHIELD/SUN SCREEN. THIS SETBACK ALSO SOFTENS THE HARD EDGE OF THE EXTENSION BY CREATING SHADOW LINES.

EXTENSIONS GIVE THE DOME A NEEDED HORIZONTAL LINE, HELPING TO WED THE DOME TO THE GROUND.

THEY ALSO BREAK UP THE BUBBLE LOOK OF THE DOME, SOFTENING ITS SEVERE ROUNDNESS.

A NATURAL SPACES DOME DOES NOT HAVE TO HAVE 5 EXTENSIONS LIKE SOME COMPETITORS DOMES. YOUR DOME KIT COMES AS A COMPLETE DOME WITH NOTHING LEFT OUT FOR EXTENSIONS. YOU ONLY ADD THEM ON AS YOU NEED TO.

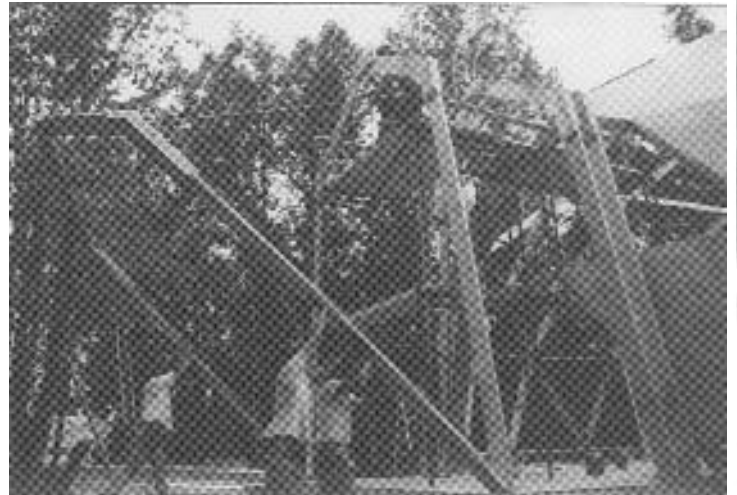
AS SHOWN AT RIGHT, MANY PEOPLE USE THE EXTENSIONS FOR A GREEN HOUSE, SUN SPACE, OR HOT TUB ROOM. BY COMING OUT THE EAST OR WEST SIDE OF THE DOME, A LARGE GROUP OF WINDOWS CAN BE PUT ON THE SOUTH SLANTED WALL FOR SOLAR GAIN. IN THIS CASE AT RIGHT AN ATRIUM DOOR IS ON THE END WALL LEADING TO A DECK.

IN MOST EVERY DOME AN EXTENSION IS USED FOR ENTRY. IN COLDER CLIMATES THIS IS SET UP WITH AN INNER AND OUTER DOOR WITH A CLOSET BETWEEN. THIS CREATES AN ENERGY LOCK, KEEPING THE COLD WIND FROM DIRECTLY ENTERING THE DOME WHEN THE DOOR IS OPENED.





OUR EXCLUSIVE TWO STORY EXTENSION FOR HIGH PROFILE DOMES IN THIS CASE PROVIDES A MAIN FLOOR ENTRY AND BREAKFAST ROOM ALONG WITH A 2ND STORY EXTENSION OF THE MASTER BEDROOM. NOTE THE ONE PIECE PREFABRICATED ARCH AT RIGHT AND THE SUNBURST AT LEFT.



FOR ARCHITECTURAL DESIGN AS WELL AS STRUCTURAL STABILITY, WE MATCH THE LOWER LEVEL WITH THE EXTENSION ABOVE. THE LINES OF EXTENSION SEEM TO GROW OUT OF THE GROUND DIMINISHING ITS ADD-ON LOOK. BY COMPLETELY SUPPORTING ALL SIDES OF IT, WE ELIMINATE DIFFERENTIAL SETTLING THAT COULD TAKE PLACE.

EXTENSIONS SEEM TO OVERPOWER THE DOME WHEN VIEWED FROM THE OUTSIDE. THE PICTURE BELOW WAS TAKEN WITH A WIDE-ANGLE LENS, WHICH DIDN'T HELP. HOWEVER, THE DOME HAS THAT QUALITY OF LOOKING SMALL ON THE OUTSIDE WHILE THE EXTENSION LOOKS LARGER. YOU JUST HAVE TO GET INSIDE TO SEE HOW THEY BALANCE EACH OTHER.



The All-Weather Wood Foundation

WHAT IS AN ALL-WEATHER WOOD FOUNDATION?

IT'S A BASEMENT BUILT OF WOOD, JUST LIKE THE WALLS OF YOUR HOUSE - WITH A DIFFERENCE.

THE DIFFERENCE IS THAT THE WOOD FRAMING AND PLYWOOD ARE PRESSURE-PRESERVATIVE-TREATED TO MAKE THEM LAST IN CONTACT WITH THE GROUND, LIKE THE WOOD PLINGS AND SUPPORTS UNDER HIGH-RISE BUILDINGS CONSTRUCTED MORE THAN 80 YEARS AGO. (THE PRESERVATIVE TREATMENT IS EVEN BETTER NOW.)

WHY IS AN AWWF SO GOOD?

IT'S A BETTER BUILDING SYSTEM BECAUSE IT HAS FEATURES NO OTHER FOUNDATION SYSTEM CAN OFFER. HERE ARE JUST A FEW.

1. IT IS DESIGNED AND ENGINEERED ESPECIALLY FOR YOUR HOME SITE, YOUR SOIL CONDITIONS, YOUR HOUSE PLAN. WOOD FOUNDATIONS DON'T CRACK BECAUSE PLYWOOD-AND-LUMBER CONSTRUCTION ACTS AS A STRUCTURAL DIAPHRAGM, A BRIDGE ACROSS AREAS OF DIFFERING SOIL SETTLEMENT. WOOD HAS THE ABILITY TO ABSORB STRESSES OF ALL TYPES THAT CAUSE CRACKS IN MORE BRITTLE MATERIALS.

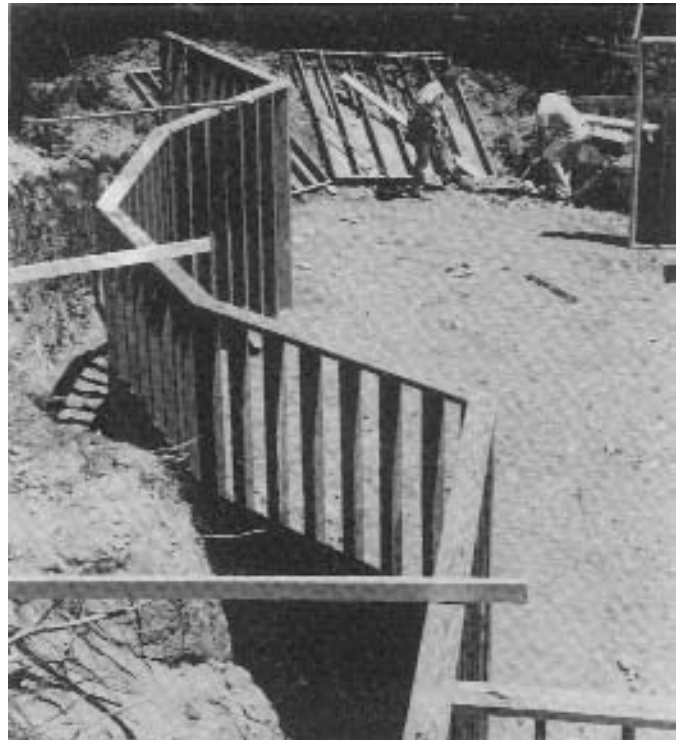
2. THE ALL-WEATHER WOOD FOUNDATION PROVIDES DRIER, MORE COMFORTABLE LIVING AREA BELOW GRADE. THE AWWF STARTS WITH AN EXCELLENT DRAINAGE SYSTEM BUILT IN, NOT FIX-IT MEASURES LATER. THE AWWF IS DRY TO START WITH, BECAUSE IT'S BUILT TO BE DRY WITH DRY MATERIALS, AND IT STAYS THAT WAY. WHETHER YOUR HOUSE IS SET INTO A HILLSIDE OR STANDS IN A LEVEL LOT, YOU GET NO MOIST, CLAMMY BASEMENTY FEELINGS, NO MUSTY SMELLS.

3. THE AWWF COSTS LESS TO LIVE IN. WOOD IS A NATURAL INSULATOR AND WOOD FRAMING PROVIDES FOR EASE OF INSTALLING THICKER BATT-TYPE INSULATION, RESULTING IN SUBSTANTIALLY LESS HEAT LOSS THROUGH THE WALL. YOU DON'T HAVE TO PAY FOR EXCESSIVE HEAT LOSS THROUGH THE FOUNDATION. AN INSULATED WOOD FOUNDATION SAVES MANY DOLLARS ANNUALLY IN FUEL COSTS.

4. AN AWWF CAN CUT YOUR INITIAL BUILDING COSTS. YOUR BUILDER DOESN'T HAVE TO PAY WORKMEN OR DELAY CONSTRUCTION WHILE WAITING FOR RAIN TO STOP, GROUND TO DRY OR THAW, OR CONCRETE OR MORTAR TO CURE. HE CAN PUT IN AN AWWF IN ANY WEATHER. YOUR HOUSE GOES UP FASTER. YOU GET A HIGH-QUALITY HOME, BOTTOM TO TOP, AND THE SAVINGS CAN BE PASSED ON TO YOU.

5. A WOOD FOUNDATION IS EASY TO FINISH INSIDE. THERE IS NO NEED TO ATTACH FURRING STRIPS TO PERMIT INSTALLING INSULATION AND INTERIOR FINISH MATERIALS SUCH AS DRYWALL OR PANELING. WITH AN AWWF, THE NAILABLE STUDS ARE ALREADY IN PLACE. THICKER, MORE EFFECTIVE INSULATION CAN BE READILY ADDED TO AN AWWF WALL. FINISHING IS AS SIMPLE AS ANY OTHER WOOD WALL. IF YOU ARE A HANDY HOMEBOWNER, YOU CAN SAVE EVEN MORE MONEY BY DOING THE FINISHING WORK YOURSELF.

6. THE AWWF EXTERIOR CAN BE FINISHED MANY, MANY ATTRACTIVE WAYS. IT CAN MATCH OR COMPLEMENT THE REST OF YOUR HOME'S EXTERIOR. IT CAN BE FINISHED WITH WOOD SIDING, STUCCO, BRICK VENEER - ANY KIND OF FINISH USED ON THE UPPER PART OF A CONVENTIONAL HOME. PLYWOOD SIDING WITH WOOD STAINS MAKE AVAILABLE MANY PLEASING COMBINATIONS OF TEXTURE AND COLOR FOR



7. AN AWWF PROVIDES MORE ACTUAL LIVING AREA BELOW GRADE. MULTIPLY THE EXTRA THREE TO SIX INCHES OF CONCRETE OR MASONRY WALL THICKNESS BY THE LENGTH AND WIDTH OF EACH WALL IN YOUR BASEMENT. ADD THE ANSWERS TOGETHER TO GET THE TOTAL EXTRA SPACE YOUR AWWF PROVIDES. THIS CAN ADD FROM 35 TO 70 SQUARE FEET OR MORE. AT TODAY'S CONSTRUCTION COSTS, IT'S A MEANINGFUL BONUS BENEFIT.

8. AN AWWF IS EASY TO REMODEL. YOU CAN ADD WINDOW OR DOOR OPENINGS OR READILY MAKE ADDITIONS TO AN AWWF AT A LATER DATE.

WHO SAYS AN AWWF IS A BETTER BUILDING SYSTEM?

ALL-WEATHER WOOD FOUNDATIONS ARE RECOGNIZED BY ALL THE MAJOR BUILDING CODES IN THE UNITED STATES AND BY MOST LOCAL CODES. THEY ARE ALSO ACCEPTED BY BOTH GOVERNMENT AND PRIVATE MORTGAGE INSURING AND LENDING AGENCIES. THE FARMERS HOME ADMINISTRATION GUARANTEES LOANS UP TO 50 YEARS FOR CERTAIN MULTI-FAMILY HOUSING UNITS ON ALL-WEATHER WOOD FOUNDATIONS. LOANS FOR SINGLE-FAMILY HOMES ON AWWF'S RUN THE SAME LENGTH AS OTHER CONVENTIONAL HOME LOANS. INSURANCE RATES ARE THE SAME AS FOR OTHER FOUNDATION SYSTEMS. PEOPLE WHO LIVE IN HOMES ON ALL-WEATHER WOOD FOUNDATIONS SAY THAT THEY WOULDN'T HAVE IT ANY OTHER WAY.

a Natural Spaces wood foundation



ALL WOOD FOUNDATIONS ARE NOT CREATED EQUAL

READING THRU OUR LITERATURE, YOU KNOW THAT NATURAL SPACES IS COMMITTED TO RESOURCE EFFICIENCY AND MINIMIZING ENVIRONMENTAL DEGRADATION.

WHEN FIRST AVAILABLE, WE SWITCHED TO THE NEW ACQ TREATED WOOD CONTAINING NO ARSENATE, CHROMIUM OR OTHER EPA LISTED HAZARDOUS ITEMS.

ACQ PRESERVE IS GUARANTEED TO PROTECT AGAINST ROT, DECAY AND TERMITE ATTACK USING AN ENVIRONMENTALLY-SENSITIVE PRESERVATIVE. IT ALSO COMES WITH A LIFETIME WARRANTY.

WE ALSO USE A 60 MIL THICK MEMBRANE WATERPROOFING WHICH WILL NOT DRY OUT AND CRACK LIKE OLD-FASHIONED TAR DAMPPROOFING.

WE USE HIGH QUALITY STAINLESS STEEL NAILS BELOW GRADE.

OUR STANDARD WALL UTILIZES ACQ PRESERVED 2X8 KILN DRIED STUDS FOR ADDED STRENGTH AND INSULATION VALUE. OUR FOOTINGS ARE 2X10 PROVIDING BETTER BEARING.

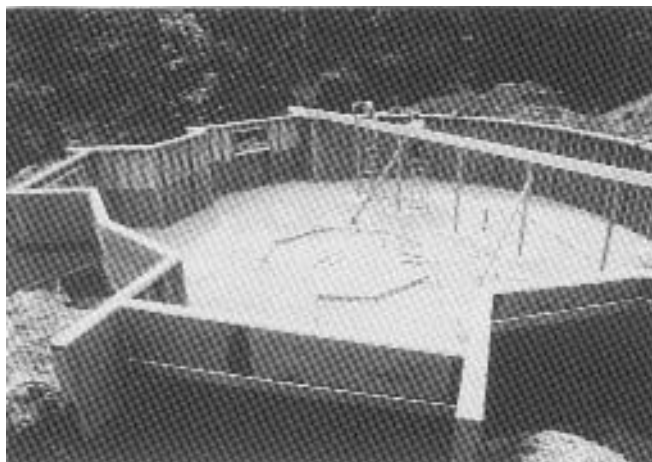
WE CUSTOM BUILD OUR TREATED WOOD FOUNDATIONS IN PRE-PANELIZED SECTIONS TO MATCH YOUR DOME ABOVE. THE STUD SIZE, SPACING AND DETAILS ARE WORKED OUT FOR YOUR SITE. FOR THOSE WHO WANT TO BUILD AND FABRICATE THEIR OWN FOUNDATION PANELS, WE CAN PROVIDE DETAILED SHOP DRAWINGS.

THOSE ARE MOST OF THE REASONS WHY OURS IS THE HIGHEST QUALITY TREATED WOOD DOME FOUNDATION ON THE MARKET.

OTHER FOUNDATIONS:

OUR DOMES ARE OFTEN BUILT USING OTHER TYPES OF FOUNDATIONS: INSULATED CONCRETE SLAB ON GRADE (OFTEN WITH RADIANT FLOOR HEATING SYSTEMS BUILT IN); CRAWL SPACES; PIER FOOTINGS; FULL LOWER LEVELS (BASEMENT OR WALK OUT).

WE ALSO HAVE MANY DOMES UTILIZING THE NEW INSULATED FOAM FORMS FOR REINFORCED POURED CONCRETE WALLS.



cupolas

ventillation & view type

THIS IS WHAT THE LOW PROFILE VENT CUPOLA LOOKS LIKE ON A 40' DIAM. DOME. IT'S DESIGNED TO BE AS UNOBTRUSIVE AS POSSIBLE.

THE VENT CUPOLA IS DESIGNED FOR RELEASING ANY MOISTURE-LADEN AIR THAT WOULD HAVE BEEN TRAPPED WITHIN THE DOME WALL/ROOF. (ALSO SEE PAGE 7).

THIS VENT CUPOLA COMES PRE-CUT READY TO INSTALL WHEN YOU BUY OUR PRE-CUT DOME SHELL PACKAGE. WHEN YOU OWNER-BUILD, WE INCLUDE COMPLETE PLANS.

THE PICTURE AT RIGHT SHOWS OUR BASE VENT SKIRT AT THE TOP OF THE RISER WALL. IT ALLOWS AIR INTO THE SHELL CAVITY AT THE BOTTOM OF THE TRIANGLES.

AT RIGHT IS AN INSIDE LOOK AT OUR VIEW CUPOLA WITHOUT THE LOFT FLOOR. THE WINDOWS PROVIDE EXCELLENT NATURAL WHOLE HOUSE VENTILATION AS EXPLAINED ON PAGE 10.

THE WINDOWS ARE OPERATED BY AN EXTENDED POLE CRANK OR BY THE TOUCH OF A BUTTON IF YOU HAVE THE OPTIONAL ELECTRIC OPERATORS.

THE AWNING WINDOWS ARE PROTECTED FROM RAIN BY THE OVERHANG OF THE CUPOLA ROOF. WITH AN ELECTRIC OPERATOR, YOU CAN ALSO HAVE A RAIN SENSOR CLOSER CONTROL.

ALTHOUGH WE CALL THIS TYPE OF CUPOLA THE VIEW CUPOLA BECAUSE OF ITS WINDOWS, ITS ORIGINAL INTENT WAS FOR VENTILATING THE INSIDE LIVING SPACE OF THE DOME. AS THE HOT AIR RISES TO THE TOP, WIND ACTION OVER AND AROUND THE CUPOLA SUCKS THE HOT AIR OUT OF THE LEEWARD SIDE. JUST UTILIZING OLD-FASHIONED PRINCIPLES.

THERE IS A CERTAIN AMOUNT OF LIGHT GAIN WITH ALL THE WINDOWS UP TOP BUT THAT SHOULD NOT BE THE MAIN REASON FOR CHOOSING A CUPOLA.

THE STANDARD WINDOW HEIGHT IN OUR VIEW CUPOLA IS 24". WE CAN ADJUST THE HEIGHT ABOVE THE DOME TO ALLOW FOR TALLER WINDOWS. THIS WOULD ALSO RAISE THE FLOOR OF THE SKYLOFT.

THE ACTUAL DIAMETER OF THE CUPOLA IS DEPENDENT UPON THE OPENING CREATED BY THE TOP PENTAGON IN EACH DOME SIZE.



skyloft view cupola

OUR OPTIONAL SKYLOFT IS SUSPENDED FROM THE DOME FRAMEWORK PUTTING YOU AT EYE LEVEL WITH THE CUPOLA WINDOWS.

BREATHTAKING VIEWS TO THE HORIZON.

THE ULTIMATE DOME HOME OBSERVATION PLATFORM-WITH OR WITHOUT TELESCOPE. A RETREAT SPACE TO END ALL.

THE SKYLOFT IS ACTUALLY A VERY SIMPLE STRUCTURE TO BUILD. WE SET UP A VERTICAL STRUT IN EACH CORNER OF THE TOP PENTAGON. THE ROOF STRUTS ARE ATTACHED TO THE TOP OF THESE POSTS AND THE FLOOR JOISTS TO THE BOTTOM.

THE FLOOR JOISTS AND ROOF STRUTS ARE EACH JOINED AT THE CENTER TO A NATURAL SPACES HUB UNIT FORMING AN EXTREMELY STRONG AND RIGID CONNECTION.

ACCESS TO THE SKYLOFT CAN BE BY A STAIR/LADDER OR A DISAPPEARING TYPE STAIR. SMALL SPIRAL STAIRS WILL ALSO WORK.

WINDOW SEATS ARE USUALLY SET UP UNDER ONE OR TWO OF THE WINDOWS.

WINDOWS DO NOT HAVE TO BE PUT ON ALL SIDES - THERE IS USUALLY A CHIMNEY FLUE COMING UP ONE SIDE OR MAYBE YOU WANT TO BLOCK OUT A CERTAIN VIEW. FOR SECURITY AND AIR FLOW, A RAILING IS BUILT BETWEEN FLOOR & DOME.

OTHER DOME COMPANIES HAVE TO SUPPORT THEIR CUPOLA FROM BELOW. OURS SEEMS TO FLOAT WHILE BEING STRONG ENOUGH TO SAFELY SUPPORT AS MANY PEOPLE AS CAN PHYSICALLY FIT IN THE CUPOLA.



interior panels

THE CHOICE OF THE INTERIOR PANEL SETS THE WHOLE MOOD OF YOUR DOME INTERIOR - FROM EARLY RUSTIC TO MODERN CABIN TO HIGH TECH SCANDINAVIAN.

PICTURES DON'T DO DOME INTERIORS JUSTICE. YOU HAVE TO SEE THE INSIDE AND PREFERABLY WITH THE TYPE OF PANEL YOU INTEND TO INSTALL.

MOST NATURAL SPACES INTERIORS ARE FINISHED WITH 1X6 OR 1X8 TONGUE AND GROOVE, V-JOINTED BOARDS. SPRUCE IS THE LEAST EXPENSIVE MATERIAL (SHOWN RIGHT) WITH OTHER CHOICES BEING PINE, CEDAR, BIRCH, ASH, REDWOOD, OAK, ELM, MAPLE, WALNUT OR WHATEVER YOU WANT.

WE'VE LEARNED THAT WHEN YOU DO THE DOME TRIANGLES IN WOOD, YOU SHOULD PUT SHEETROCK ON THE RISER WALL AND ON INTERIOR WALLS TO PROVIDE CONTRAST. IF NOT, YOU TEND TO LOSE THE DRAMATIC IMPACT OF THE WOOD TRIANGLES.

THE TRIANGLES ARE FABRICATED IN THE SHOP, CUT INTO TRIANGLES AND A BACKER BOARD ADDED TO MAKE THEM ONE PIECE. WHEN THEY ARE PUT UP ON THE DOME, A TRIM PIECE IS PUT ON OVER THE JOINT, ALLOWING FOR EXPANSION OR CONTRACTION AND HIDING OTHER IMPERFECTIONS IN THE JOINT. WE ALSO SHOW YOU, THE OWNER-BUILDER, HOW TO LAYOUT AND CUT THE INTERIOR PANELS.

YOU'LL BE SURPRISED AT THE LOW COST FOR THESE PANELS, ESPECIALLY USING SPRUCE OR PINE.

THE PICTURES ON THESE PAGES MAY NOT ACCURATELY DEPICT THE TONE OF OUR INTERIOR PANELS. SPRUCE HAS A VERY LIGHT TONE CREATING A BRIGHT INTERIOR. IN OUR OFFICE DOME WE HAVE WIPED THE PANELS WITH A WHITE STAIN AND THEN APPLIED A SATIN FINISH, CLEAR, NON-YELLOWING, LOW V.O.C. SEALER - A NATURAL WOOD WHITE INTERIOR OPTION TO SHEETROCK.

OUR INTERIOR PANEL SYSTEMS DO NOT REQUIRE ANY BRACING. THEY ARE ENGINEERED TO FREE-SPAN EACH TRIANGLE.

IF REGULAR SHEETROCK IS TO BE USED, EACH TRIANGLE WOULD REQUIRE 2X4 BRACING AT 24 O.C. TO SUPPORT THE SHEETROCK.

BEFORE YOU DO THAT, TAKE ANOTHER LOOK AT OUR WOOD TRIANGLES.





ALL PICTURES SHOW SPRUCE TAG

custom windows

THE BEAUTY OF THE DOME IS DEFINITELY ENHANCED BY OUR ABILITY TO PLACE WINDOWS IN ANY ONE OF ITS TRIANGLES. WINDOW SHAPE AND SIZE ARE NOT CONSTRAINTS. WE BRING THE OUTDOORS INSIDE THRU CRYSTAL CLEAR FLOAT GLASS. WE CAN FLOOD THAT WOULD-BE DREARY ROOM WITH LIGHT ALL DAY, THE MOON AT NIGHT AND HAVE A PLACE FOR YOUR FAVORITE HANGING PLANTS.

OUR WINDOW SYSTEM WAS DESIGNED WITH ONLY DOMES IN MIND. WE DIDN'T HAVE TO COMPROMISE ANY DETAILS. THERE SIMPLY IS NOT ANOTHER CUSTOM DOME WINDOW AS VERSATILE, WATERTIGHT AND MAINTENANCE FREE.

WHY A NATURAL SPACES SKYLIGHT? WE KNOW THAT ANY WINDOW ON A DOME HAS TO BE TREATED AS A SKYLIGHT. IT HAS TO BE DESIGNED SO THAT THE FLASHING INTEGRATES PROPERLY WITH THE ROOF SHINGLES. IT HAS TO BE POSITIONED FOR PROPER SOLAR ORIENTATION. THE SHAPE AND GROUPING SHOULD FIT THE SIZE AND MOOD OF THE ROOM.

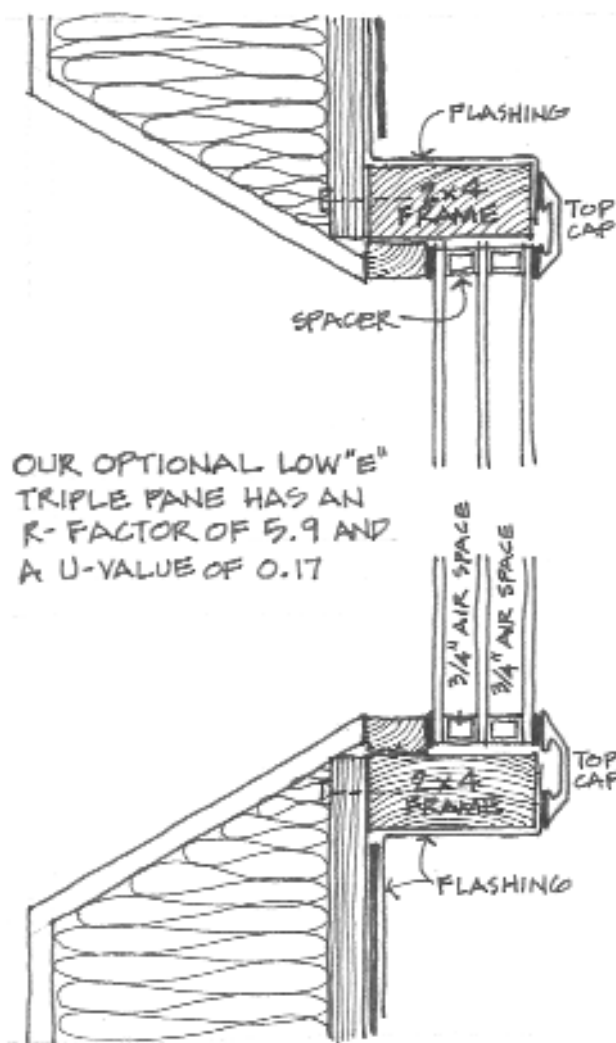
WE CUSTOM DESIGN EACH WINDOW ON EVERY DOME. USING A MULTITUDE OF BASIC SIZES THAT MATCH THE ANGLES OF EACH DOME TRIANGLE, WE ACHIEVE THE CORRECT GROUPING AND PLACEMENT FOR YOUR PARTICULAR DOME AND SITE.

CREATING ENERGY-EFFICIENT SKYLIGHTS. THE KEY TO THE ENERGY ADVANTAGE OF SKYLIGHTS IS THAT THEY MAKE DIRECT USE OF THE SUN'S LIGHT, TRANSMITTING SOLAR LIGHT TO REDUCE THE DEMAND FOR ELECTRICITY FOR LIGHTING, WHILE EFFICIENTLY UTILIZING THE SUN'S HEAT TO FUNCTION AS A PASSIVE SOLAR COLLECTOR. TRIPLE PANE CONSTRUCTION COMBINED WITH SOLAR LIGHTING AND HEATING EFFECTS, OFFSET THE ENERGY NEGATIVE OF HEAT CONDUCTION THRU THE GLASS.

WE THINK YOU WILL AGREE AS YOU READ THRU THIS BOOK - NATURAL SPACES OFFERS THE WIDEST VARIETY, MOST OPTIONS AND HIGHEST QUALITY IN SKYLIGHTS.



look at these features -



OUR OPTIONAL LOW "E" TRIPLE PANE HAS AN R-FACTOR OF 5.9 AND A U-VALUE OF 0.17

OUR 2X4 WOOD FRAME IS ACTUALLY A STRUCTURAL FRAME. NO INTERIOR FRAMING OR BRANCHING IS REQUIRED - SIMPLY MOUNT THE FRAME ON TOP OF OUR PLYWOOD SKIN, THEN LAG SCREW THRU THE PLYWOOD INTO THE #1 GRADE SOUTHERN YELLOW PINE FRAME.

ANOTHER FEATURE IS THE 6" LONG FLASHING EXTENDING OUT FROM THE WINDOW ON ALL SIDES. PREFINISHED BROWN (15 OPTIONAL COLORS ARE AVAILABLE), THIS FLASHING INSURES A PROPER SEAL WITH THE ROOFING. SOME OTHER SKYLIGHTS COME WITH ONLY A 2" LEG - BARELY ENOUGH TO SLIP UNDER OR OVER THE SHINGLES.

NATURAL SPACES INSULATED GLASS WINDOWS ARE AVAILABLE IN DOUBLE, TRIPLE AND FOUR PANE SYSTEMS. WE USE 3/16" AND THICK TEMPERED GLASS, WHICH IS 5 TIMES STRONGER THAN PLATE GLASS. OUR SKYLIGHTS HAVE MADE IT THRU HAIL STORMS WHERE CONVENTIONAL 1/8" THICK TEMPERED GLASS SKYLIGHTS WERE BLASTED OUT.

BY USING GLASS INSTEAD OF PLASTIC, OUR WINDOWS REMAIN CRYSTAL CLEAR FOREVER. WE ALSO HAVE AN AIR SPACE BETWEEN EACH PANE CREATING ONE OF THE BEST INSULATING RATINGS OBTAINABLE. LOW E IS ALSO AN OPTION.

AROUND THE ENTIRE WINDOW IS A PERFORATED SPACER CHANNEL CONTAINING SILICATE, A DEHYDRATING AGENT, ABSORBING ANY MOISTURE THAT HAPPENS TO BE BETWEEN THE PANES. THE ENTIRE GLASS EDGE IS HERMETICALLY SEALED WITH A DUAL SEAL, APPLIED UNDER CONTROLLED CONDITIONS, TO PROVIDE PROTECTION AGAINST ANY VAPOR PENETRATION. THE GLASS UNIT IS MANUFACTURED AND GUARANTEED AGAINST MOISTURE BETWEEN THE PANES FOR 5 OR 10 YEARS BY ONE OF THE MIDWEST'S LEADING INSULATED GLASS SUPPLIERS. IF, FOR SOME STRANGE REASON, IT FAILS, IT WILL BE REPLACED, FREE OF CHARGE.

NATURAL SPACES USES A SPECIAL BRONZE ANODIZED ALUMINIUM EXTRUSION BETWEEN THE GLASS AND EXTERIOR FLASHING. WE USE TREMCO BUTYL TAPE SEALANTS - THE SAME TYPE USED IN HIGH-RISE BUILDINGS. THE TOP CAP IS SECURED USING STAINLESS STEEL SCREWS AND WASHERS.

SO SURE ARE WE OF OUR DESIGN, THAT WE OFFER A 5-YEAR GUARANTEE AGAINST ANY RAIN LEAKAGE THRU OUR FRAME OR FLASHING ASSEMBLY.

WE WANT TO PRODUCE A TRUE MAINTENANCE-FREE, LONG-LASTING, GOOD-LOOKING, ENERGY-EFFICIENT WINDOW - AND WE THINK WE'VE DONE IT.

window shapes

triangles

WE MATCH OUR TRIANGLE WINDOWS TO THE PARTICULAR DOME PANEL THEY ARE PUT INTO. THE 36 & 40 DIAM. DOMES HAVE 3 DIFFERENT PANEL SIZES WHILE THE 45-49 DIAM. DOMES HAVE 6 DIFFERENT SIZES. WE THEN HAVE WINDOW SIZES WITHIN EACH OF THE PANELS THAT GO IN 4 INCREMENTS. FOR EVERY TRIANGLE IN THE DOME, THERE MAY BE 10-12 WINDOW SIZES. GENERALLY, SIZES RUN FROM TRIANGLES WITH A BASE 36 HIGH TO SIZES WITH A BASE 88 WIDE AND AN ALTITUDE 74 HIGH.



hexagons

THIS IS A VERY APPEALING SKYLIGHT FOR UPPER FLOOR AREAS LIKE BATHROOMS, DRESSING ROOMS, ETC.

OUR HEXAGON WINDOWS THAT FIT WITHIN THE DOME PANEL GENERALLY RUN FROM 24 TIP-TO-TIP SIZES UP TO 52 TIP-TO-TIP SIZE.

WE ALSO MAKE SUPER LARGE HEXAGON WINDOWS THAT FIT OVER THE POINT WHERE SIX TRIANGLES COME TOGETHER. THESE SIZES RUN FROM 48 TIP-TO-TIP UP TO A MAXIMUM OF 84 TIP-TO-TIP SIZE.



trapezoids

THE TRAPEZOID SHAPE IS USED PRIMARILY ON THE MAIN FLOOR WHERE COUNTERS CUT OFF THE LOWER PART OF THE TRIANGLE - OVER A KITCHEN SINK BEING THE MOST POPULAR. THE EXACT SHAPE OF THE TRAPEZOID IS MATCHED TO THE SHAPE OF THE TRIANGLE PANEL IT'S IN. THE HEIGHT AND WIDTH OF THE TRAPEZOID IS CUSTOM SIZED AND DEPENDS ON PHYSICAL INTERIOR FACTORS AND OUTSIDE VIEWS.

THE PICTURE AT RIGHT SHOWS A BAND OF THE TRAPEZOID SHAPED WINDOWS IN A 29 DIAM. DOME AROUND THE EXTENSION ARCH.



garages

THE DOME HAS BEEN VERY SUCCESSFUL IN SATISFYING THE FUNCTIONAL AND ESTHETIC NEEDS OF THE GARAGE WHEN PLACED NEXT TO THE DOME HOME. THE 29 DIAM. OFFERS 625 SQ. FT. PLUS A SUBSTANTIAL LOFT AREA. THE 36 DIAM. OFFERS 950 SQ. FT. BECAUSE OF ITS SHAPE, THE DOME PROVIDES STORAGE AREAS ON THE SIDES AND BACK FOR ALL THE STUFF YOU FORGOT. WE ARE ERECTING A 45 DIAM. DOME GARAGE WHICH WILL HOUSE 2 SUPERCAB TRUCKS, YOUR BASIC CAR, 2 CARS BEING RESTORED, MOWER, TILLER, BIKES, TOPPER AND A PROJECT AREA ALONG WITH A LARGE LOFT. ALL THIS WITH NO SUPPORT POSTS. OF COURSE, THE DOME GARAGE WILL BLEND IN BEST WITH YOUR DOME HOME.

WEDDING THE CONVENTIONAL GARAGE TO THE DOME IS BEST DONE BY TRYING TO ACHIEVE SOME CONTINUITY IN THE PITCH OF THE ROOF AND IN THE LINE OF THE ROOF. THE SIDING SHOULD MATCH THAT ON THE DOME AND THE ROOFING SHOULD MATCH THAT ON THE DOME.

IF YOU HAVE A NEED FOR SEVERAL GARAGE DOORS ALL FACING THE DRIVE, THIS MAY BE THE GARAGE FOR YOU. IT HAS SOME ATTIC STORAGE BUT THAT IS LIMITED BY THE ROOF TRUSSES.

THE GAMBREL OR BARN ROOF CAN BREAK-UP OR SOFTEN THE CONVENTIONAL LOW-PITCH GARAGE ROOF AND MIMIC THE ROOF LINE OF THE EXTENSION ARCHES.

THE TUCK-UNDER GARAGE CAN BE USED ON SLOPING SITES. THE EXPOSED ROOF, IF FLAT, CAN BE USED AS A DECK IF CARE IS TAKEN TO MAKE SURE THERE IS PROPER WATER RUN-OFF AND SAFEGUARDS AGAINST ICE BUILD-UP. THE DECK SHOULD ACTUALLY BE WOOD DECKING RAISED ABOVE THE GARAGE ROOF ON SLEEPERS. BECAUSE THE DOME GOES OVER PART OF THE GARAGE, THERE IS NEED FOR ADDITIONAL SUPPORT IN THE GARAGE. FOR THIS REASON TWO 9 WIDE DOORS WORK BETTER THAN ONE 16 WIDE.

THIS CAN BE THE LEAST EXPENSIVE TYPE OF GARAGE BECAUSE OF THE DUAL USE WITH THE DOME OF WALLS, FLOOR, ROOF AND SUPPORTS.



large domes

NATURAL SPACES PATENTED DOME CONNECTION HARDWARE IS ENGINEERED FOR DOMES UP TO 80 IN DIAMETER. THIS CATALOG IS GEARED TO RESIDENTIAL STRUCTURES WHICH USUALLY MEANS DIAMETERS FROM 26 TO 49. HOWEVER, WE DO OFFER THE FOLLOWING SIZES:

MODEL 2100 52 DIAM. LOW PROFILE
MODEL 2300 54 DIAM. MID PROFILE

MODEL 2600 58 DIAM. LOW PROFILE
MODEL 2800 60 DIAM. MID PROFILE

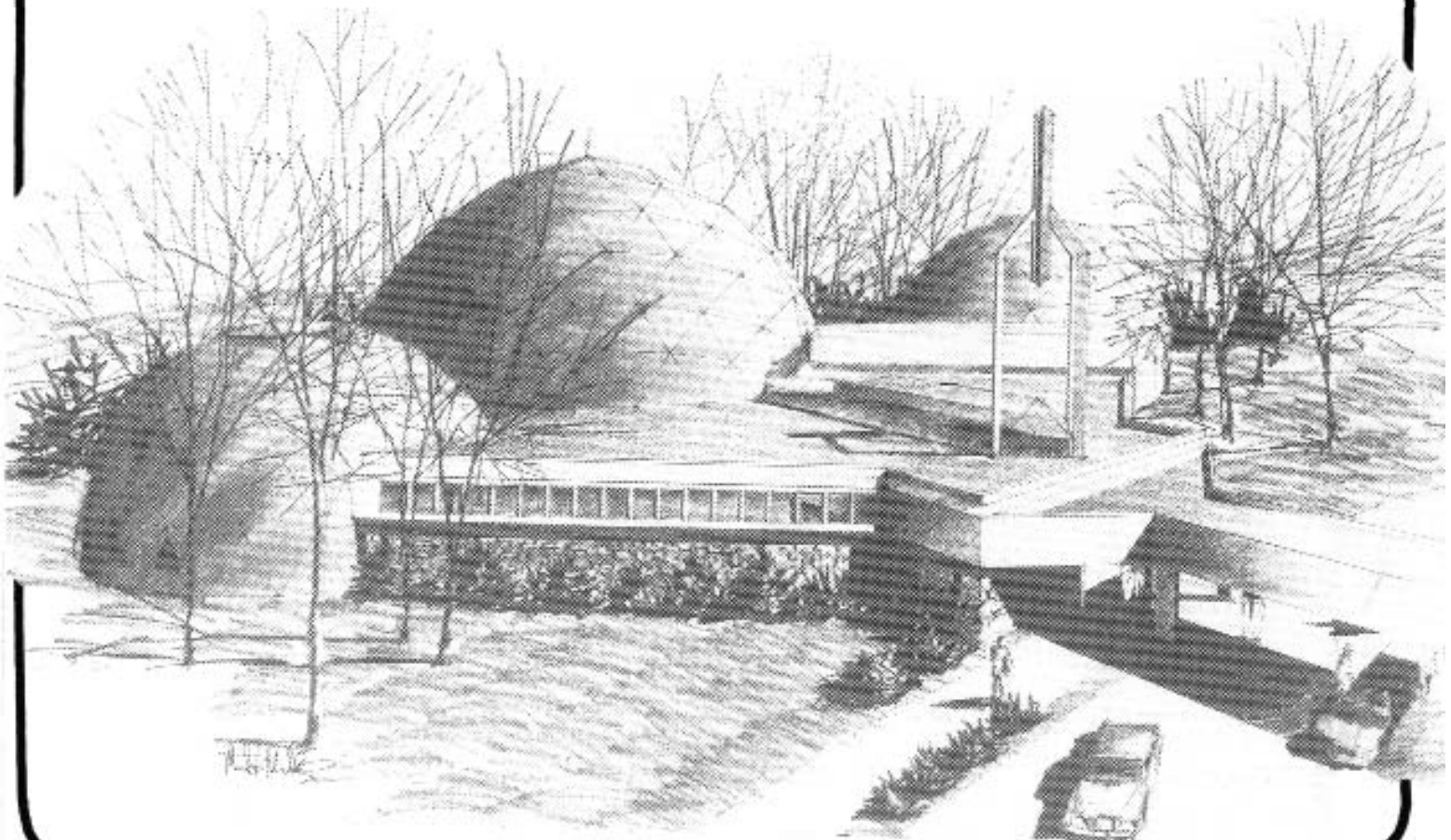
MODEL 3300 65 DIAM. LOW PROFILE
MODEL 3500 67 DIAM. MID PROFILE

MODEL 4000 72 DIAM. LOW PROFILE
MODEL 4300 74 DIAM. MID PROFILE
MODEL 4700 78 DIAM. LOW PROFILE
MODEL 5000 80 DIAM. MID PROFILE

PROJECTS WITH LARGE DOMES HAVE INCLUDED: 72 DIAM. DOME FOR THE CITY OF POINT HOPE, ALASKA (NORTH OF THE ARCTIC CIRCLE), FOR THEIR CITY HALL AND COMMUNITY CENTER; TWO 74 DIAM. DOMES FOR AN ASSEMBLY OF 600 20,000 SQ. FT. CHURCH COMPLEX NEAR INDIANAPOLIS; 52 DIAM. ERECTED AT THE SUMMIT OF THE GREENLAND ICE CAP.

BELOW IS A TRIPLE DOME CHURCH. IT HAS A 49 MID-PROFILE FOR OFFICES, STORAGE & MEETING ROOMS; A 74 MID-PROFILE SANCTUARY, & A 60 LOW-PROFILE FOR FELLOWSHIP HALL & CLASSROOMS BELOW.

COMMERCIAL, PUBLIC & INSTITUTIONAL DOMES REQUIRE PREPARATION OF PLANS WITH COMPLETE ENGINEERING CERTIFICATION. WORKING WITH OUR CONSULTING ENGINEERS, NATURAL SPACES CAN PROVIDE THESE SERVICES.



commercial uses

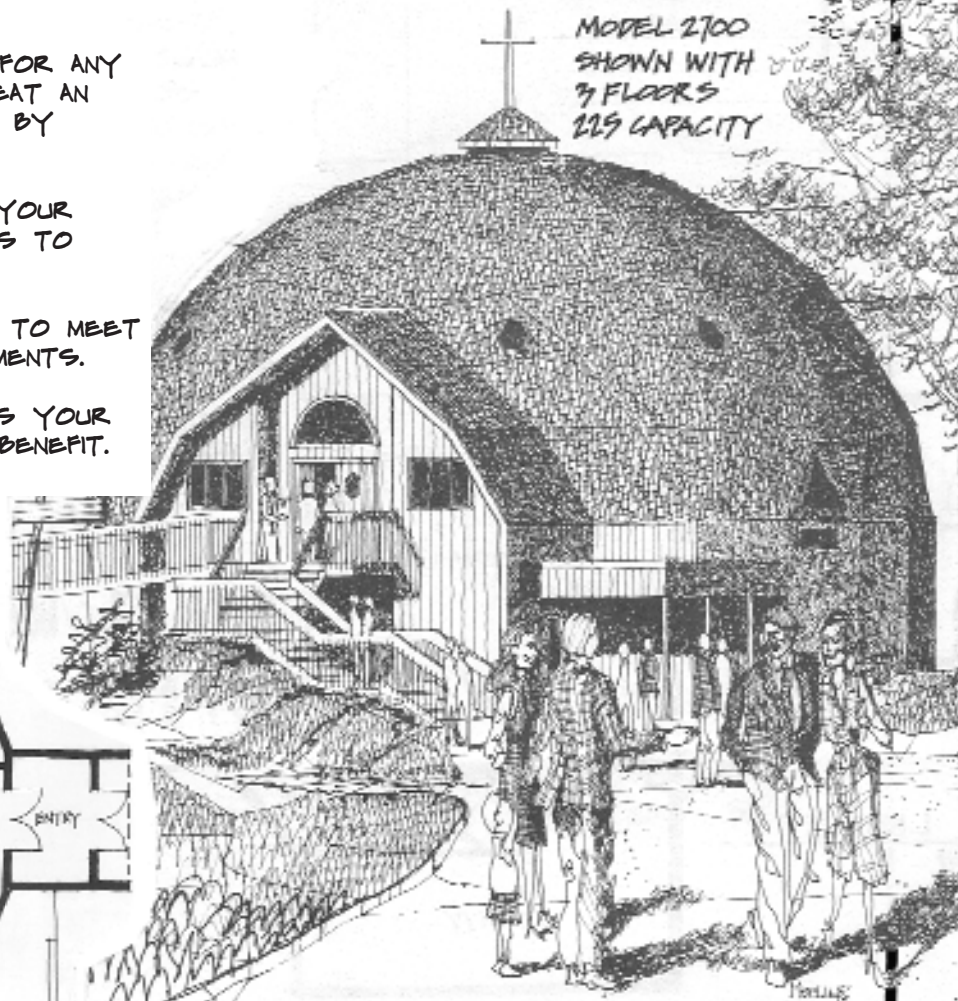
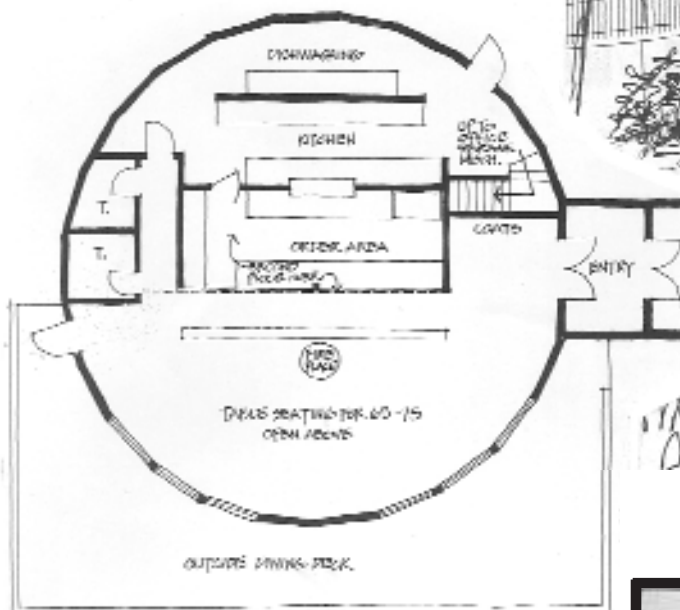
THE DOME STRUCTURE IS A NATURAL FOR ANY USE REQUIRING OPEN SPACE. TO REPEAT AN OFTEN USED PHRASE - LIMITED ONLY BY YOUR IMAGINATION .

NATURAL SPACES CAN PROVIDE YOUR CUSTOM FABRICATED DOME COMPONENTS TO MEET COMMERCIAL CODES.

OUR ENGINEERS CAN PROVIDE PROFESSIONALLY-ENGINEERED DESIGNS TO MEET THE MOST STRINGENT CODE REQUIREMENTS.

WRITE OR CALL US TO DISCUSS YOUR CONCEPTS-OUR EXPERIENCE IS YOUR BENEFIT.

CHURCH -
MODEL 2700
SHOWN WITH
3 FLOORS
225 CAPACITY



DOME RESTAURANT AT LEFT IS 52 DIAM. MODEL 2000. DOME CHURCH ABOVE IS 60 DIAM. MODEL 2700. DOME CHURCH BELOW IS 74 DIAM. MODEL 4300. PART OF 2 DOME GROUP.

the DESIC
restaurant



solar orientation

THIS IS WHERE THE DOME REALLY SHINES! (COULDN'T RESIST THE PUN)

WITH THE ABILITY TO PLACE WINDOWS IN ANY TRIANGLE, THE DOME CAN BE OPENED UP TO WHEREVER THE SUN IS, HIGH OR LOW.

VIRTUALLY ANY SITE CAN BE OPENED UP TO THE SOUTH BY THE DOME WINDOWS.

THE DOME AT RIGHT HAS A LARGE PENTAGON GROUP OF WINDOWS FACING SOUTHEAST. THE SOLAR GREENHOUSE FACES DUE SOUTH FOR MAXIMUM SOLAR GAIN. BELOW THE GREENHOUSE IS A ROCK STORAGE MASS FOR EXCESS HEAT. THE FORCED AIR FURNACE THEN DRAWS THE AIR FROM THIS SPACE.

WORKS GREAT - EVEN ITS NORTHERN WISCONSIN LOCATION.

THE DOME AT RIGHT HAS SIX VERY HIGH TRIANGLE WINDOWS FACING SOUTH AND SOUTHWEST. THE WINDOW HEIGHT WAS DUE TO THE SUN ANGLE AND AVAILABLE TREE OPENINGS. IN THE WINTER, THE SUN HITS A LARGE BRICK FIREPLACE MASS FROM 11AM TO 3PM. THE SLIDING GLASS DOORS AND SOUTH WINDOWS ON THE WEST FACING EXTENSION ALSO COLLECT HEAT.

THIS NORTHERN MINNESOTA DOME IS ALWAYS BRIGHT AND CHEERFUL INSIDE, UPLIFTING THE INHABITANTS EVEN ON DULL WINTER DAYS.

FORM FOLLOWS FUNCTION IN MOST DOMES. IF YOU WANT SUN, YOU PUT IN A WINDOW. IF YOU WANT A VIEW, YOU PUT IN A WINDOW.

PASSIVE SOLAR SIMPLY MEANS YOU DON'T HAVE PUMPS, PIPES, MOTORS OR FANS TO GET THE SOLAR ENERGY INTO YOUR DOME. MUCH CHEAPER THAT WAY.

IT CAN BE AS SIMPLE AS THE DOME AT RIGHT WITH ALMOST ALL OF ITS WINDOWS FACING SOUTHEAST, SOUTH AND SOUTHWEST.

WE TRY TO USE PASSIVE SOLAR PRINCIPLES IN PLANNING THE DOME WITH YOU. THERE IS JUST SO MUCH TO BE GAINED. A NATURAL SPACES DOME, BEING SUPERINSULATED, CAN RETAIN THE SUN'S HEAT LONGER.

AS FUEL COSTS CONTINUE TO RISE, THE FREE ENERGY FROM THE SUN WILL LOOK BETTER AND BETTER.



site analysis

contour map

KNOWING THE SLOPE OF YOUR SITE IS CRITICAL IN THE PROPER DEVELOPMENT OF YOUR PLAN. IF THERE IS ANY SLOPE AT ALL, A CONTOUR MAP SHOULD BE MADE.

THIS MAP WOULD ALSO SPOT THE MAJOR TREES TO HELP PLAN FOR THE BEST OPEN SOLAR GAIN AREA IN WINTER AND FOR SUMMER SHADE.

THE LINES AT RIGHT ARE CONTOURS FOR AN ACTUAL SITE. A VERY STEEP SITE BUT ONE WITH A LOT OF DRAMA. EXACTLY HOW CLOSE TO OR HOW FAR OVER THE EDGE OF THE HILL A DOME SHOULD BE PLACED, A MAP WOULD DETERMINE.

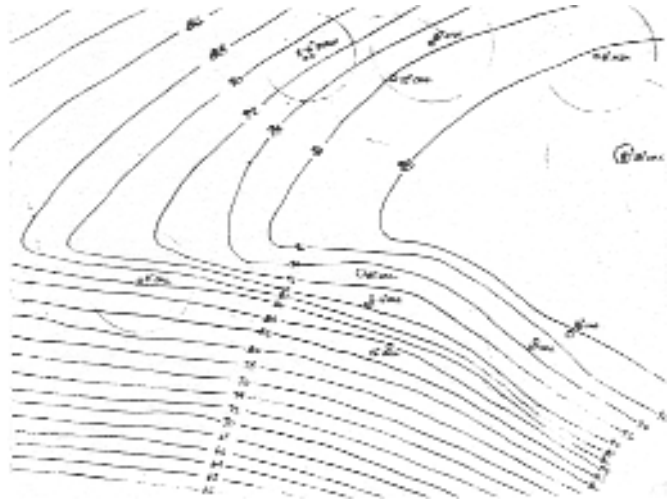
WHEN THE ACTUAL DIGGING FOR THE FOOTINGS BEGIN, SOMEONE HAS TO TELL THE EXCAVATOR HOW FAR DOWN TO DIG.

TOO FAR DOWN AND YOU HAVE DRAINAGE PROBLEMS, A WALK-OUT THAT WALKS OUT INTO A HILL, OR DRIVEWAYS TOO STEEP TO DRIVE.

NOT FAR ENOUGH DOWN AND YOU HAVE FROST PROBLEMS, ENTRIES TOO HIGH OR NOT ENOUGH BACKFILL.

GUESSING ISN'T GOOD ENOUGH. YOU SHOULD EITHER RENT A TRANSIT AND TRY DOING IT YOURSELF OR HIRE IT OUT.

NATURAL SPACES CAN PROVIDE THIS SERVICE WITH EXPERIENCED PEOPLE THAT CAN DRAW UP A CONTOUR MAP QUICKLY AND ACCURATELY.



site selection

THE ACTUAL BUILDING SITE SHOULD TAKE INTO ACCOUNT MANY PHYSICAL AND VISUAL CHARACTERISTICS:

SUN, WIND, RAIN, SNOW

TREES, SHADE, WINDBREAKS

WATER RUNOFF, DRAINAGE

DRIVEWAYS, WALKS, GARAGES

LANDSCAPING

VIEWS, BOTH GOOD AND BAD

PRIVACY, NOISE-AND MANY MORE

NATURAL SPACES CAN HELP YOU IN SITUATING YOUR DOME ON YOUR PRESENT OR PROSPECTIVE SITE, USING OUR YEARS OF EXPERIENCE.



dome geometry

OUR COMPETITION HAS A SOMEWHAT REPETITIVE VIEW OF THE DOME. IT SEEMS TO BE BASED ON THEIR VIEWING THE DOME AS AN OBJECT TO BE MANUFACTURED. THEY WANT TO KEEP THE DOME SIMPLE - FOR THEM THAT IS.

WHEN THEY BUILD DIFFERENT DOME SIZES THEY SIMPLY CHANGE THE STRUT AND PANEL LENGTHS PROPORTIONALLY. SO, A 26' DIAM. HAS 5 1/2' MAXIMUM EDGE LENGTHS AND THEIR 46' DIAM. HAS OVER 10' MAXIMUM EDGE LENGTHS.

THEY CLAIM THAT BY REPETITION OF ANGLES THEY CAN KEEP THE COST DOWN.

THEN HOW COME A NATURAL SPACES DOME IS CHEAPER?!

WHY DO WE THINK THEIR VIEW IS WRONG AND WHAT DO WE DO ABOUT IT?

FIRST OF ALL, CAN YOU IMAGINE LIFTING OR DEALING WITH A TRIANGLE HAVING SIDES 10' OR GREATER?

ON THE OTHER HAND, THE DOME WITH TRIANGLES OF 5 1/2' OR LESS ON A SIDE WOULD BE A BREEZE. BUT WHAT ABOUT ITS EFFICIENCY IN USING MATERIALS?

NATURAL SPACES DESIGNS DOMES FOR PEOPLE WHO BUILD DOMES. WE FEEL THAT EVERY PART SHOULD BE ABLE TO BE LIFTED AND HANDLED REASONABLY BY PEOPLE - AFTER ALL, THEY ARE THE ONES BUILDING. WHEN THE EDGE LENGTHS GO BEYOND 8'-9', STRUTS AND PANELS GET HARD TO HANDLE.

WHAT DID WE DO ABOUT IT? WE CHANGED THE MATHEMATICS OF THE DOME WHEN WE CHANGED SIZES. NO MATTER IF YOU ARE BUILDING A 26' DIAM. DOME OR A 74' DIAM. DOME - THE STRUT/PANEL SIZES ARE ABOUT THE SAME. THIS MAKES HANDLING A LOT MORE HUMAN.

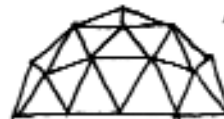
IT ALSO LOOKS BETTER. OUR LARGER SIZE DOMES ARE NOT AS CLUNKY LOOKING - THEY'RE MORE SPHERICAL. THEY HAVE A BETTER SCALE AND PROPORTION TO HUMANS.

NOW, THE COMPETITION CAN ARGUE THAT THEIR LARGE DOME HAS FEWER PARTS - BUT WHAT WOULD YOU RATHER HAVE? AN ACHING BACK OR A NICE LOOKING, EASILY ERECTABLE DOME?

THEIR DOMES



NATURAL SPACES DOMES:



2 FREQUENCY SERIES
20'-29' DIAMETER
MID PROFILE



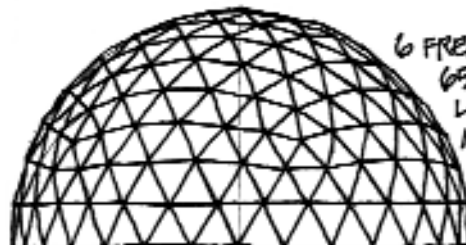
3 FREQUENCY SERIES
30'-40' DIAMETER
LOW PROFILE (SHOWN)
HIGH PROFILE



4 FREQUENCY SERIES
42'-51' DIAMETER
LOW PROFILE (SHOWN)
MID PROFILE



5 FREQUENCY SERIES
52'-60' DIAMETER
LOW PROFILE
MID PROFILE (SHOWN)



6 FREQUENCY SERIES
65'-80' DIAMETER
LOW PROFILE
MID PROFILE (SHOWN)

construction manual

IF YOU'RE GOING TO PUT UP YOUR DOME, YOU NEED HELP AND LOTS OF IT. AFTER ALL, WHEN WAS THE LAST TIME YOU PUT UP ONE?

THAT'S WHY NATURAL SPACES DECIDED TO PUT 28 YEARS OF DOME BUILDING EXPERIENCE INTO A CONSTRUCTION MANUAL. WE DIDN'T WANT YOU TO BE ALONE.

THIS IS NOT YOUR ORDINARY \$5 BOOKLET THAT SHOWS YOU HOW THE DOME SHELL GOES UP. WE'RE TALKING HEAVY-DUTY CONSTRUCTION MANUAL - CURRENTLY 350 PAGES WITH 600 PHOTOS COVERING THE BUILDING OF A NATURAL SPACES DOME. WE ALSO INCLUDE SEVERAL STANDARD BUILDING BOOKLETS COVERING SUCH THINGS AS PLUMBING, ELECTRICAL, VENTILATION, AND LUMBER BUILDING BASICS.

WE HAVE ADDED AN HOUR-LONG VIDEO SHOWING OUR BEACH DOME BEING BUILT - RISERS, FRAMEWORK, PANELS, VIEW CUPOLA SKYLOFT, EXTENSIONS, WALL FRAMING, UPPER FLOOR FRAMING, SKYLIGHT INSTALLATION, AND OTHER ITEMS.

WE TRY TO SHOW BUILDING SEQUENCES CLEARLY WITH LOTS OF PICTURES AND DETAILS.

OUR NATURAL SPACES CONSTRUCTION MANUAL IS DESIGNED FOR THE NOVICE OWNER-BUILDER. THERE ARE ALSO SECTIONS ON CUTTING YOUR OWN DOME KIT: HOW TO MAKE RISERS, SUPER-WAL STRUTS, THE EXTERIOR AND INTERIOR TRIANGLE PANELS, VENT CUPOLA, VIEW CUPOLA/SKYLOFT AND EXTENSION ARCHES.

AS NEW PRODUCTS COME OUT OR AS OUR CUSTOMERS REPORT THEIR USE OF A NEW PRODUCT OR PROCEDURE, WE UPDATE OUR CONSTRUCTION MANUAL. WE ALSO INCLUDE RELATED PRODUCT LITERATURE, TRYING TO FEATURE ITEMS THAT ARE ENVIRONMENTALLY SAFE AND SAFE.

IF YOU HAVE QUESTIONS WHILE YOU'RE BUILDING, YOU'LL HAVE OUR PHONE NUMBER. WE'LL BE AROUND - WE EXPECT TO BE BUILDING DOMES FOR A LONG, LONG TIME.

YOU GET OUR CONSTRUCTION MANUAL WHEN YOU PURCHASE A DOME. YOU CAN ALSO GET IT BEFORE YOU GET YOUR DOME. THE CONSTRUCTION MANUAL IS OUR WAY OF STANDING BY YOUR SIDE IN YOUR HOURS OF NEED.



book of plans

THE PLANS IN THE PLAN BOOK WERE DEVELOPED FOR INDIVIDUAL CLIENTS. YOU WILL BE REVIEWING THEIR IDEAS AND DREAMS. WE HOPE YOU WILL PERUSE THIS BOOK GLEANING NEW IDEAS FROM EACH PLAN. WE WANT TO ATTEMPT TO RAISE YOUR DOME CONSCIOUSNESS BY EXPOSING YOU TO A WIDE VARIETY OF UNUSUAL PLANS.

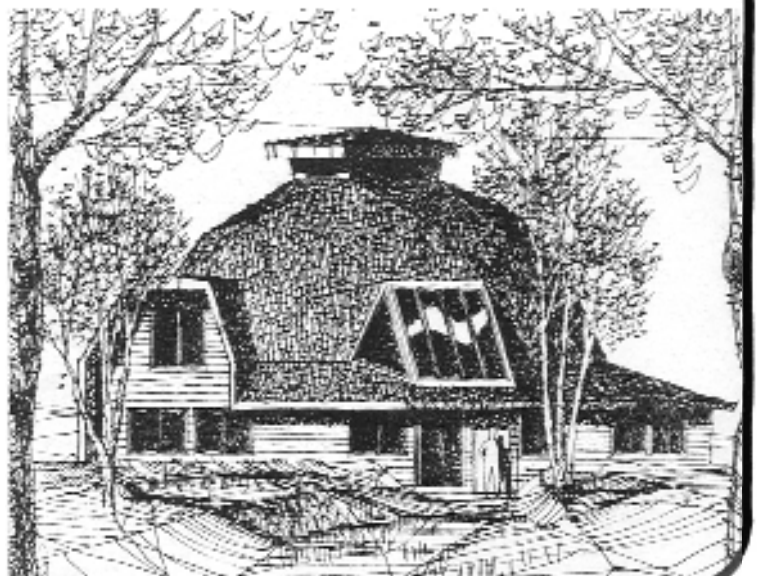
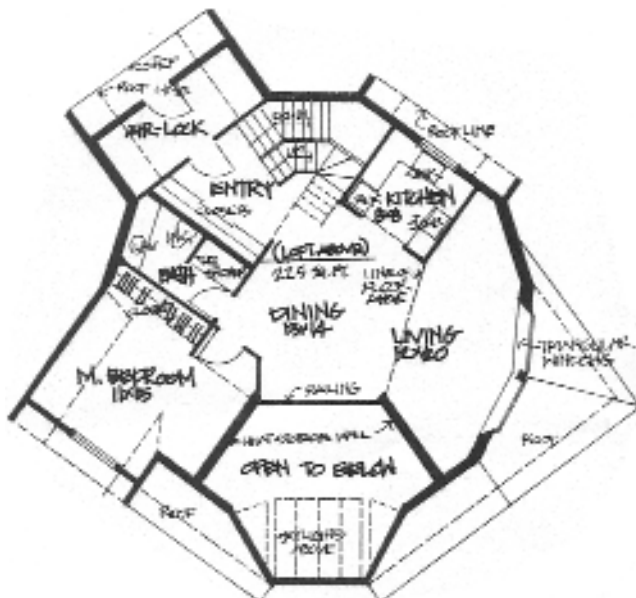
PLANS ARE A VERY MOLDABLE PRODUCT - ALL YOU HAVE TO DO TO CHANGE SOMETHING IS ERASE A LINE AND DRAW A NEW ONE.

DON'T BE LOOKING FOR THAT PERFECT PLAN - IT USUALLY DOESN'T EXIST, AT LEAST UNTIL IT IS CREATED JUST FOR YOU.

THE PLAN BOOK HAS FOUR TO SIX PLANS FOR EACH SIZE DOME. WE JUST DON'T SHOW YOU A BASIC FIRST AND SECOND FLOOR PLAN LIKE EVERYONE ELSE - WE INCLUDE ALL THREE FLOOR PLANS (SINCE MOST OF OUR DOMES HAVE LOWER LEVELS) AND WE SHOW A CUT-A-WAY SECTION OF ALL THREE FLOORS. THEN WE INCLUDE A RENDERED PICTURE OF WHAT THAT DOME LOOKS LIKE IN A REAL SETTING.

DOMES COME TRUE 2 FEATURES ONLY 45-49 DOMES WITH 4-5 GROUPIES. DOMES COME TRUE FEATURES MAINLY 29-40 DOMES WITH 2 AT 46 AND 3 GROUPIE PLANS.

NATURAL SPACES DOMES WOULD LIKE TO HAVE THE OPPORTUNITY TO CREATE YOUR PLAN WITH YOU - OUR EXPERIENCE AND YOUR DREAMS WILL MAKE YOUR DOME COME TRUE.



interior planning kit

OUR INTERIOR PLANNING KIT PROVIDES ARCHITECTURAL SCALE (1/4" = 1'-0") GRID DRAWINGS FOR THE FLOOR PLANNING ALONG WITH A DOME GRID CROSS-SECTION FOR PLANNING HEIGHTS.

WE INDICATE WHERE EXTENSIONS CAN BE ATTACHED AND GIVE YOU CUT-OUTS FOR PLANNING THEM.

WE SHOW YOU POSSIBLE WINDOW PATTERNS. YOU ARE ALSO GIVEN THE ORIENTATION OF THE SKYLOFT AND VIEW CUPOLA.

WE DON'T EXPECT YOU TO PLAN OUT EVERY DETAIL OF YOUR DOME HOME. WE WILL TAKE YOUR BASIC IDEAS AND FINISH THEM BUT SOME PEOPLE NEVER GOT OVER THE PAPER DOLL CUT-OUT STAGE.

WE PROVIDE AN EXTENSIVE GROUP OF FURNITURE AND APPLIANCE CUT-OUTS THAT MATCH THE SCALE OF YOUR GRID FLOOR PLANS. CUT-OUTS FOR LIVING ROOMS, DINING ROOMS, BEDROOMS, BATHS, KITCHENS, CLOSETS, GARAGES, AND MISC. ITEMS.

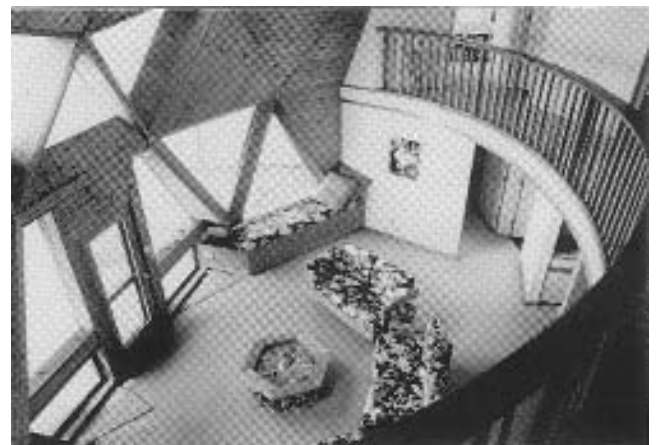
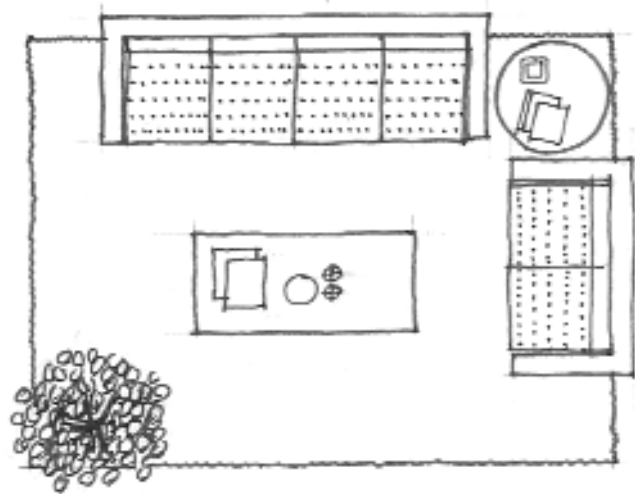
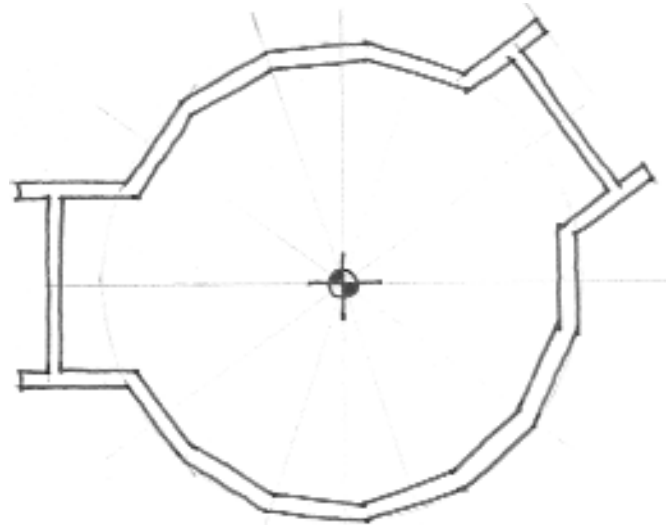
YOU MAY HAVE SOME SPECIAL ITEMS THAT WITH A TAPE MEASURE AND OUR SCALE RULER PROVIDED, YOU CAN MEASURE YOUR ACTUAL PIECE AND MAKE A SCALE MODEL CUT-OUT.

INCLUDED IS A DESIGN PROGRAM QUESTIONNAIRE THAT WE HAVE YOU FILL OUT AND RETURN ALONG WITH YOUR LAYOUT IDEAS. WE CAN THEN PLAN A DOME BASED ON YOU ALONE.

IF YOU WANT TO USE YOUR COMPUTER FOR DRAWING, YOU NEED TO HAVE A C.A.D. PROGRAM (EVEN A LOW-END SYSTEM) THAT IMPORTS DWG OR DXF FILES. WE CAN THEN SEND YOU A COMPUTER DISK WITH AN INTERIOR PLANNING KIT SIMILAR TO OUR PAPER COPY. SEE OUT PRICE LIST.

IF YOU ARE AT ALL INTERESTED IN A CUSTOM DOME PLAN, THEN YOU NEED THIS KIT.

THE MORE EFFORT YOU PUT INTO THE PLANNING PROCESS, THE BETTER YOUR HOUSE WILL FUNCTION AS AN ENVIRONMENT FOR YOUR PARTICULAR FAMILY AND SITE.



design *philosophy*

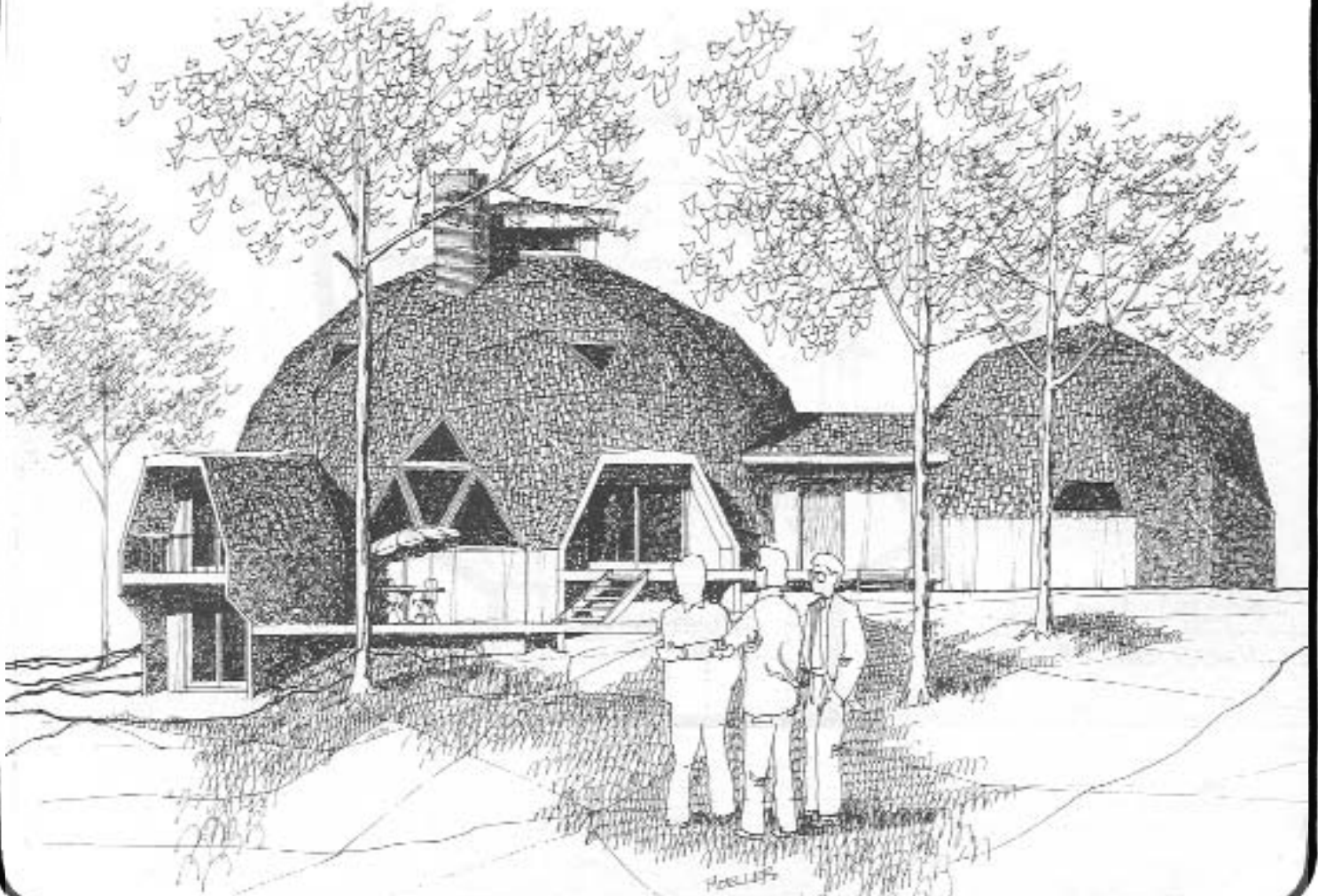
AT NATURAL SPACES, WE BELIEVE THERE IS NO SUCH THING AS A STANDARD DOME PLAN JUST AS THERE IS NO SUCH THING AS AN AVERAGE FAMILY. ALSO, EACH SITE WILL HAVE ITS OWN ADVANTAGES AND PARTICULARITIES. ROAD APPROACHES, SUN EXPOSURE, WINTER WINDS, SUMMER BREEZES, SHADE TREES, VIEWS, PRIVACY AND MANY OTHER ITEMS ALL HAVE A BEARING ON THE DESIGN OF YOUR DOME. YOUR FAMILY'S NEEDS AND FUNCTIONS ALONG WITH EACH INHABITANT'S WISHES MUST ALSO BE CONSIDERED IN THE PLANNING.

TO RELEGATE THE DOME TO STANDARD PLANS IS TO COMPLETELY NEGATE ONE OF ITS UNIQUE FEATURES.

A GEODESIC DOME OFFERS AN UNBELIEVABLE VARIETY OF PLAN OPTIONS. THE UNOBSCURED SPACE WITHIN THE FREE-SPAN DOME HOME ALLOWS FOR A FRESH AND UNINHABITED APPROACH TO CONTEMPORARY LIVING.

A THOROUGH UNDERSTANDING OF THE DOME CONCEPT AND ATTENTION TO YOUR FAMILY AND SITE ARE OF PRIME IMPORTANCE IN DESIGNING YOUR DOME HOME.

A VIEW OF HOUSE, FAMILY AND SITE AS ONE INDIVISIBLE WHOLE IS OF GREATEST IMPORTANCE.



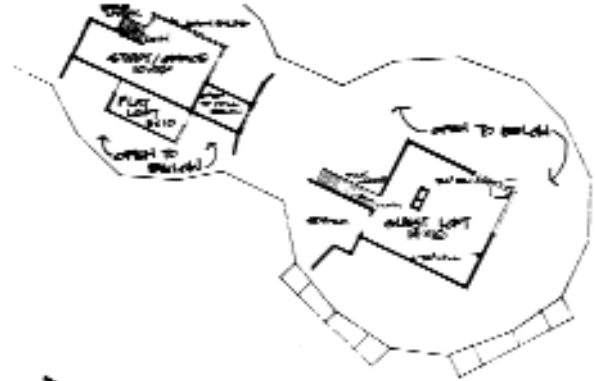
custom plans

preliminary

YOUR OWN ARCHITECTURAL PROGRAM (LIKE THE ONE FROM THE INTERIOR PLANNING KIT) ALONG WITH ANY SKETCHES OF YOUR DOME IDEAS AND YOUR SITE LOCATION ARE NEEDED FOR US TO PROVIDE YOU WITH A SET OF CUSTOM PRELIMINARY DESIGN DRAWINGS.

OUR INVOLVEMENT THRU PERSONAL CONTACT OR WRITTEN COMMUNICATION WILL ANSWER SPECIFIC QUESTIONS DURING THIS PHASE.

3 SETS OF PRELIMINARY DRAWINGS OF ALL 3 FLOOR PLANS, CROSS SECTION AND AN ELEVATION WILL BE SENT FOR YOUR APPROVAL BEFORE CONTINUING WITH CONSTRUCTION PLANS.



construction

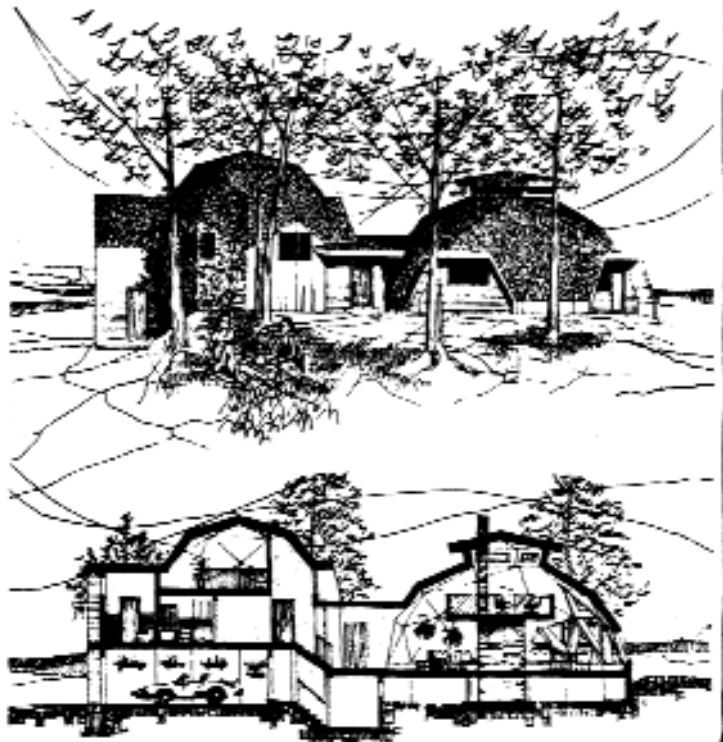
YOUR APPROVED PRELIMINARY PLANS ARE THEN DEVELOPED INTO CONSTRUCTION PLANS BY ADDING ALL THE DIMENSIONS, NOTES AND DETAILS, FOUNDATION PLAN, FLOOR FRAMING PLANS, SITE PLAN AND MORE ELEVATIONS. OTHER DRAWINGS ARE AVAILABLE.

5 SETS OF PLANS ARE SENT TO YOU UPON COMPLETION. ADDITIONAL SETS ARE AVAILABLE.

YOUR CUSTOM PLANS PERTAIN TO YOUR CUSTOMIZATION OF THE DOME. YOU DO NOT PAY FOR STANDARD DETAILS PERTAINING TO THE DOME ITSELF - THESE ARE INCLUDED IN OUR CONSTRUCTION MANUAL.

A NATURAL SPACES STANDARD DOME SHELL ENGINEERING PACKAGE WITH A COVER SHEET LISTING YOUR PROJECT AND ADDRESS CAN BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN YOUR STATE. PROVIDED FREE WITH YOUR DOME KIT.

IF YOUR BUILDING INSPECTION DEPARTMENT REQUIRES ENGINEERING CERTIFICATION OF YOUR CUSTOM DOME DRAWINGS, WE HAVE CONSULTING ENGINEERS EXPERIENCED IN DOMES AND LICENSED EVERYWHERE. THEY WILL REVIEW, ANALYZE AND PROVIDE CALCULATIONS FOR ALL PERTINENT DETAILS. THEY CAN THEN PROVIDE THE REQUIRED STRUCTURAL CERTIFICATION.



owner built

OWNER BUILDING - AH, THE JOYS OF DOING EVERYTHING YOURSELVES.

THE MAIN REASON PEOPLE TAKE ON THE TASK OF OWNER-BUILDING IS TO SAVE MONEY. WITH THE RIGHT HELP, YOU CAN SAVE A BUNDLE - FROM 20% TO AS MUCH AS 60%.

IF YOU'VE BEEN FRUSTRATED TRYING TO FIGURE OUT HOW TO GET THAT NEW DOME HOME YOU NEED AND WANT WITHOUT PAYING AND ARM AND A LEG TO A CONTRACTOR, POSSIBLY THIS IS THE BUILDING METHOD FOR YOU.

IT WILL REQUIRE A MAJOR COMMITMENT FROM YOURSELVES. IT WILL BE ALL CONSUMING. AT TIMES YOU'LL BE READY TO QUIT. IT WILL TAX YOUR MARRIAGE OR ANY RELATIONSHIP.

HOWEVER, AS YOU COMPLETE THE BUILDING TASKS YOU WILL GAIN A FEELING OF CONFIDENCE AND ACCOMPLISHMENT THAT'S HARD TO IMAGINE.

YOU DON'T HAVE TO BE AN EXPERT CARPENTER TO BUILD OUR DOME HOME.

YOU CAN CUT OUT YOUR OWN STRUTS - THERE ARE NO ANGLE CUTS INVOLVED. YOU CAN ATTACH OUR PATENTED SLEEVE TO THE STRUT YOURSELF - WE SUPPLY YOU WITH A BOLT HOLE DRILLING TEMPLATE. THEN WE SUPPLY ALL THE CORRECT PLATED NUTS AND BOLTS. WE SHOW YOU HOW TO MAKE A JIG FOR THE SUPER-WAL DOUBLE STRUT FABRICATION. WE SHOW YOU HOW TO CUT THE TRIANGLES FROM REGULAR 4X8 3/4" T&G PLYWOOD. ALL OF THIS IS CLEARLY SHOWN IN OUR 250 PAGE CONSTRUCTION MANUAL.

THE NATURAL SPACES SUPER-LOK HUB SYSTEM IS A SIMPLE BOLT TOGETHER, SELF-ALIGNING PATENTED BUILDING SYSTEM FOR DOMES. IT IS SO SIMPLE THAT YOUR BUILDING CREW CAN PUT UP THE FRAMEWORK IN ONE DAY. THE TRIANGLE PANELS TAKE AN ADDED 1-2 DAYS (DEPENDING ON SIZE OF DOME). THE RENTAL OF AN INEXPENSIVE AIR NAIL GUN MAKES THE PANEL APPLICATION A BREEZE.

WHERE DO YOU BEGIN? PROBABLY AT THE OWNER-BUILDER DOME SCHOOL. WE'LL SHOW YOU HOW TO FABRICATE DOME PARTS, THEN TAKE THESE PARTS AND BUILD A SECTION OF A DOME FROM THE FOUNDATION UP THRU THE INSULATION, INTERIOR PANELS AND MUCH MORE.

THINK ABOUT IT - THEN WRITE OR CALL US.



owner - contracted



OWNER-CONTRACTING LITERALLY MEANS THAT YOU TAKE ON THE RESPONSIBILITIES OF THE GENERAL CONTRACTOR: YOU HIRE THE SUB-CONTRACTORS; YOU ORDER AND COORDINATE MATERIALS AND LABOR; YOU MAKE SURE EVERYONE IS DOING THEIR JOB; YOU ALSO SOMETIMES PICK UP AND DELIVER MATERIALS.

YOU TAKE CARE OF THE CONSTRUCTION LOAN; TAKE OUT DRAWS ON IT; PAY LABOR AND MATERIAL BILLS AND GET LIEN WAIVERS.

YOU TAKE CARE OF THE BUILDING PERMIT. YOU ALSO GET TO DEAL WITH THE INSPECTORS ON THE JOB SITE.

AND WHAT DO YOU GAIN FROM ALL THIS BESIDES THE BIGGEST DOME HEADACHE YOU EVER HAD? MONETARILY YOU WILL SAVE AT LEAST 10% TO AS MUCH AS 30% OF YOUR PROJECT COSTS - ASSUMING YOU'VE DONE YOUR HOMEWORK. YOU'LL ALSO GAIN CONTROL OVER ALL THE DECISIONS BEING MADE. WE DIDN'T SAY THAT YOU WOULD GAIN CONTROL, JUST THAT YOU WOULD BE THE ONE TO MAKE ALL OF THE JOB DECISIONS. INSTEAD OF NOT KNOWING WHY SOMETHING WAS INSTALLED WRONG OR WAS GOOFED UP, YOU WOULD BE IN ON THE INITIAL DECISION AND FIND OUT WHY IT COULDN'T BE DONE THE WAY YOU FIRST WANTED IT. YOU DO NEED TO MAINTAIN YOUR SENSE OF HUMOR.

OWNER-CONTRACTING ALLOWS YOU TO MAKE SOME CHANGES AS YOU GO, WITHOUT THE GENERAL CONTRACTOR SCREAMING AT YOU, WANTING TO CHARGE DOUBLE FOR THE CRAZY IDEA YOU HAD.

SOMETIMES YOU CAN MAKE A DEAL WITH SUBCONTRACTORS TO ASSIST THEM TO KEEP THEIR COSTS DOWN. YOU CAN HIRE YOURSELF TO DO THE THINGS YOU KNOW HOW TO DO OR WANT TO DO.

COUPLES SOMETIME WORK VERY WELL AT THIS JOB BECAUSE IT USUALLY TAKES TWO NOVICE PEOPLE TO REPLACE ONE GENERAL CONTRACTOR.



contractor built

CONTRACTOR BUILT MEANS SOMEONE OTHER THAN YOU IS DOING THE BUILDING AND HANDLING ANY SUBCONTRACTORS IN THE TOTAL CONSTRUCTION OF YOUR DOME HOME.

YOU MAY END UP DOING SOME PAINTING OR FINISHING BUT FOR THE MOST PART YOU JUST STAND BACK AND MAKE DECISIONS.

ONE OF THE MAIN FACTORS IS THAT YOU ARE TRADING DOLLARS FOR TIME. A GOOD DOME CONTRACTOR SHOULD BE ABLE TO FINISH YOUR DOME (DEPENDING ON ITS SIZE AND AMENITIES) IN FROM THREE TO SIX MONTHS. THIS, OF COURSE, IS GOING TO COST YOU MONEY FOR ALL THAT LABOR. HOWEVER, YOU ARE PAYING FOR EXPERTISE, QUALITY CONSTRUCTION AND CRAFTSMANSHIP (WE SHOULD SAY CRAFTSPERSONSHIP BUT IT DOESN'T SOUND GOOD). YOUR BUILDING PROJECT SHOULD ALSO PROCEED MORE SMOOTHLY.

AN IMPORTANT ITEM WITH ANY CONTRACTOR IS TO ESTABLISH A DETAILED, ITEMIZED CONSTRUCTION CONTRACT THAT SPECIFIES AT LEAST A TOTAL SUM. HOWEVER, A COST ITEMIZED CONTRACT IS BETTER TO DEAL WITH THE BRAND NAMES OR QUALITY OF ITEMS SHOULD BE SPECIFIED.

SOME GOOD CONTRACT FORMS ARE PUBLISHED BY THE AMERICAN INSTITUTE OF ARCHITECTS.

MOST NATURAL SPACES DEALERS WILL ACT AS A GENERAL CONTRACTOR FOR YOU. PRICES WILL VARY BY REGION BASED ON VARYING LABOR AND MATERIALS COSTS.

NATURAL SPACES WILL ACT AS AN ADVISER, CONSULTANT, OR SUPERVISOR TO YOUR GENERAL CONTRACTOR IN AREAS WHERE WE DON'T HAVE A DEALER.



financing

HERE ARE TWO WAYS MANY PEOPLE USE TO DETERMINE THEIR ABILITY TO AFFORD A PARTICULAR HOME:

1. THE TOTAL PRICE OF THE HOME AND LAND SHOULD NOT EXCEED 2 TO 3 TIMES YOUR ANNUAL INCOME.

2. A HOMEOWNER SHOULD NOT PAY MORE THAN 30% TO 35% OF THEIR TOTAL MONTHLY INCOME FOR MONTHLY HOUSING EXPENSES - MORTGAGE, HEAT, UTILITIES, REPAIR, INSURANCE.

NATURAL SPACES HAS SEVERAL MORTGAGE BROKERS AND BANKS THAT LOAN ON DOME HOMES. SOME OF THESE BROKERS CAN PROVIDE PERMANENT FINANCING IN OTHER STATES.



WE CAN PROVIDE AN ELEVEN PAGE COST ANALYSIS OF YOUR DOME PLAN. USING OUR MACINTOSH COMPUTER, OUR MAC DOME BUDGET IS A VERY ACCURATE COST ESTIMATE FOR YOU AND YOUR LENDER.

INACCURATE AND INCOMPLETE COST ESTIMATES ARE ONE OF THE GREATEST FAULTS OF OWNER-BUILDERS. OUR MAC DOME BUDGET SHOWS EVERYONE WHAT IT WILL COST TO COMPLETELY FINISH YOUR ENTIRE DOME PROJECT.

NATURAL SPACES MAINTAINS A NATIONAL DOMES FOR SALE LIST ALONG WITH A NATIONAL REGISTRY OF DOMES PROVIDING VALUABLE INFORMATION FOR THESE BROKERS. CONTACT US FOR MORE INFORMATION.



YOU SHOULD GO TO THE LENDER WITH A PERSONALIZED PACKAGE FULLY DETAILING YOUR HOME BUILDING PLANS AND YOUR CURRENT FINANCIAL STATUS. YOU NEED TO SHOW THE LENDER YOU ARE PREPARED AND RESPONSIBLE.

IF YOU TALK TO A LOAN OFFICER FOR AN HOUR OR TWO EXPLAINING ALL OF YOUR PLANS AND FINANCES, HE THEN HAS TO SUMMARIZE YOUR CONVERSATION TO HIS LOAN COMMITTEE. IF, INSTEAD, HE CAN PRESENT THE COMMITTEE WITH COMPREHENSIVE DRAWINGS, PICTURES AND DATA, YOU STAND A MUCH BETTER CHANCE FOR A FAVORABLE DECISION.

PRESENTATION PACKAGE TO LENDERS:

1. COMPLETE COSTS INCLUDING ANY BIDS OR PROPOSED CONTRACTS.

2. COMPLETE FLOOR PLANS AND ELEVATIONS OF WHAT YOU ARE GOING TO BUILD.

3. SPECIFICATIONS AS TO THE TYPE AND QUALITY OF BUILDING COMPONENTS.

4. VICINITY MAP OF PROJECT SHOWING ROADS, SCHOOLS, SHOPPING, ETC.

5. PLOT PLAN SHOWING PROPOSED HOME. PICTURES OF THE SITE ARE HELPFUL.

6. COPY OF LAND DEED AND/OR SURVEY - LEGAL DESCRIPTION.

7. SEPTIC PERMIT OR SEWER/WATER PROXIMITY.

8. OWNER-BUILDER OF OWNER-CONTRACTOR QUALIFICATIONS (IF APPLICABLE).

dome school

IF YOU'RE READY FOR THE COMFORT OF DOME LIVING, BUT YOU'RE NOT SURE YOU'RE UP TO THE CHALLENGE OF BUILDING YOUR OWN DREAM DOME, NATURAL SPACES DOMES HAS THE ANSWER - A DOME HOME CONSTRUCTION WORKSHOP FOR OWNER-BUILDERS.

IT IS THE ONLY DOME SCHOOL DEVOTED ENTIRELY TO SHOWING YOU HOW TO BUILD YOUR OWN DOME HOME BY LETTING YOU PARTICIPATE IN THE ACTUAL CONSTRUCTION.

THE WORKSHOP IS OPEN TO ANYONE WHO IS INTERESTED IN LEARNING HOW TO BUILD A DOME OR THOSE WHO WANT TO HAVE CONTROL OF THEIR DOME BUILDING PROJECT. SOME OWNERS HAVE THEIR CONTRACTORS ATTEND. THERE ARE REDUCED FEES FOR MULTIPLE ATTENDEES FROM THE SAME PROJECT.

THE WORKSHOP TAKES PLACE AT OUR FIVE DOME FACTORY, OFFICE AND MODEL DOME FACILITY IN NORTH BRANCH, MINNESOTA, ABOUT 50 MILES NORTH OF MINNEAPOLIS AND ST. PAUL, MINNESOTA. CHECK WITH US FOR EXACT DATES. NORMAL TIMES ARE THE LAST WEEKEND IN APRIL AND IN JUNE.

GIVE US A WEEKEND OF YOUR TIME AND WE'LL GIVE YOU THE HANDS-ON EXPERIENCE YOU NEED TO GET STARTED ON YOUR DOME.



HAPPY DOME SCHOOL STUDENTS



FRIDAY AFTERNOON-EVENING

DURING FRIDAY'S SESSION, OUR EXPERTS WILL INTRODUCE YOU TO THE FUNDAMENTALS OF CONSTRUCTING A DOME HOME. YOU'LL LEARN THE TERMINOLOGY AS YOU WORK YOUR WAY THROUGH THE CONSTRUCTION MANUAL, MATERIALS LIST AND BLUEPRINTS. YOU WILL ALSO VIEW A VIDEO TAPE ON DOME CONSTRUCTION AND TOUR OUR MODEL DOME AND OFFICE DOME.

SATURDAY

ON SATURDAY WE'LL PUT THE TOOLS IN YOUR HANDS SHOWING YOU HOW TO CUT YOUR OWN SUPER-WAL STRUTS, EXTERIOR PANELS, RISER WALLS, INTERIOR PANELS AND OTHER ITEMS. USING THE COMPONENTS YOU HAVE MADE, WE'LL THEN ERECT A FULL-SCALE SECTION OF A DOME ON TOP OF A JOIST AND PLYWOOD FLOOR SYSTEM.

BECAUSE WE USE REAL SIZE COMPONENTS YOU'LL BE UP ON LADDERS AND SCAFFOLDING, FOR SOME OF THE CONSTRUCTION, DUPLICATING THE REAL THING.

SUNDAY MORNING

SUNDAY'S SESSION WILL INVOLVE YOU WITH INSTALLING OUR WIDE 72 ROLLS OF FIBERGLASS INSULATION, INSTALLING VAPOR BARRIER AND INTERIOR TRIANGLE PANELS. WE WILL ALSO CUT-IN A SKYLIGHT, DEAL WITH OUR EXCLUSIVE VENTILATION SYSTEM, APPLY FELT PAPER AND INSTALL SHINGLES. YOU WILL GET TO INSPECT 8-10 SHINGLE TYPES.

SUNDAY AFTERNOON

SUNDAY AFTERNOON'S TOUR OF DOMES WILL TAKE YOU INTO 2 OR 3 OTHER COMPLETED DOMES IN THE AREA, ALLOWING YOU TO MEET AND TALK WITH THE OWNERS.

THE WORKSHOP FEE IS A SMALL PRICE TO PAY TO SAVE YOU TIME, MONEY AND FUTURE FRUSTRATION. YOU CAN BRING YOUR QUESTIONS TO THE EXPERTS AND SHARE YOUR DOME DREAMS WITH OTHER NOVICE DOME BUILDERS.

video - dvd tour

THERE IS A VIDEO/DVD YOU CAN'T AFFORD TO MISS. NATURAL SPACES DOMES WOULD LIKE TO TAKE YOU INSIDE 8 BEAUTIFUL DOME HOMES. THIS TOUR OF DOMES VIDEO-DVD IS NOT A 10 MINUTE GLIMPSE OF 2 OR 3 DOMES WITH A HIGH PRESSURE SALES PITCH. IT IS A FULL LENGTH, 50 MINUTE, INTERESTING INFORMATIVE TOUR AND CONVERSATION WITH EACH DOME OWNER.

EVERY DOME WAS CUSTOM DESIGNED TO FIT THE OWNER'S BUDGET, LIFESTYLE AND SITE. FROM A SMALL 2 BEDROOM RETIREMENT DOME, DESIGNED FOR A COUPLE, TO A LARGE 6 BEDROOM DOUBLE DOME, YOU WILL BE AMAZED AT HOW WELL THE DOME ADAPTS ITSELF TO EACH OWNER'S NEEDS.

YOU WILL SEE HOW OUR DOME HOMES CAN PROVIDE YOU WITH A TOTALLY NEW EXPERIENCE IN LIVING - A SPACIOUS, OPEN, AIRY, SKY-LIT ENVIRONMENT.

SEE FOR YOURSELF OUR VIEW CUPOLA SKYLOFT ROOM AT THE TOP OF OUR DOME, OFFERING A WONDERFUL 360 VIEW. THE PRACTICAL SIDE OF THIS CUPOLA ARE THE WINDOWS THAT OPEN, PROVIDING NATURAL VENTILATION WITH LOTS OF FRESH AIR, MINIMIZING AIR-CONDITIONING NEEDS.

SEE FOR YOURSELF HOW A NATURAL SPACES DOME LENDS ITSELF TO ANY STYLE DECOR WHETHER IT IS RUSTIC, COUNTRY STYLE, TRADITIONAL, CONTEMPORARY OR MODERNE.

SEE FOR YOURSELF HOW OUR DOMES BRING THE OUTSIDE IN WITH OUR NATURAL SPACES DOME SKYLIGHTS IN THE SHAPE OF TRIANGLES, TRAPEZOIDS, HEXAGONS OR PENTAGONS, ALLOWING SPECTACULAR PANORAMIC VIEWS. ORDER YOUR VIDEO/DVD NOW.

dome tour



THIS UNUSUAL TOUR WILL LET YOU INTO SOME OF THE MOST ENERGY-EFFICIENT, UNIQUELY-DESIGNED DOMES IN THE UPPER MIDWEST.

NO OTHER HOUSE TOUR IN THE ENTIRE WORLD OFFERS SO MANY CUSTOM DESIGNED, SUPER INSULATED DOMES OPEN FOR TOURING ON THE SAME DAY. THE DOMES ARE IN A VARIETY OF SIZES AND PRICE RANGES. PEOPLE COME FROM ALL OVER THE WORLD.

HERE'S HOW OUR TOUR WORKS - WE ARRANGE WITH 10 TO 20 OF OUR DOME OWNERS TO OPEN THEIR DOMES TO OUR TOUR REGISTRANTS FOR THE FIRST SATURDAY IN MAY AND THE FIRST SATURDAY IN OCTOBER. THEY ARE THERE TO ANSWER YOUR QUESTIONS AND EXPLAIN THEIR DOME.

WE REIMBURSE THE OWNERS FOR THEIR TIME AND EFFORT. WE CHARGE YOU A MODEST FEE FOR THE TOUR.

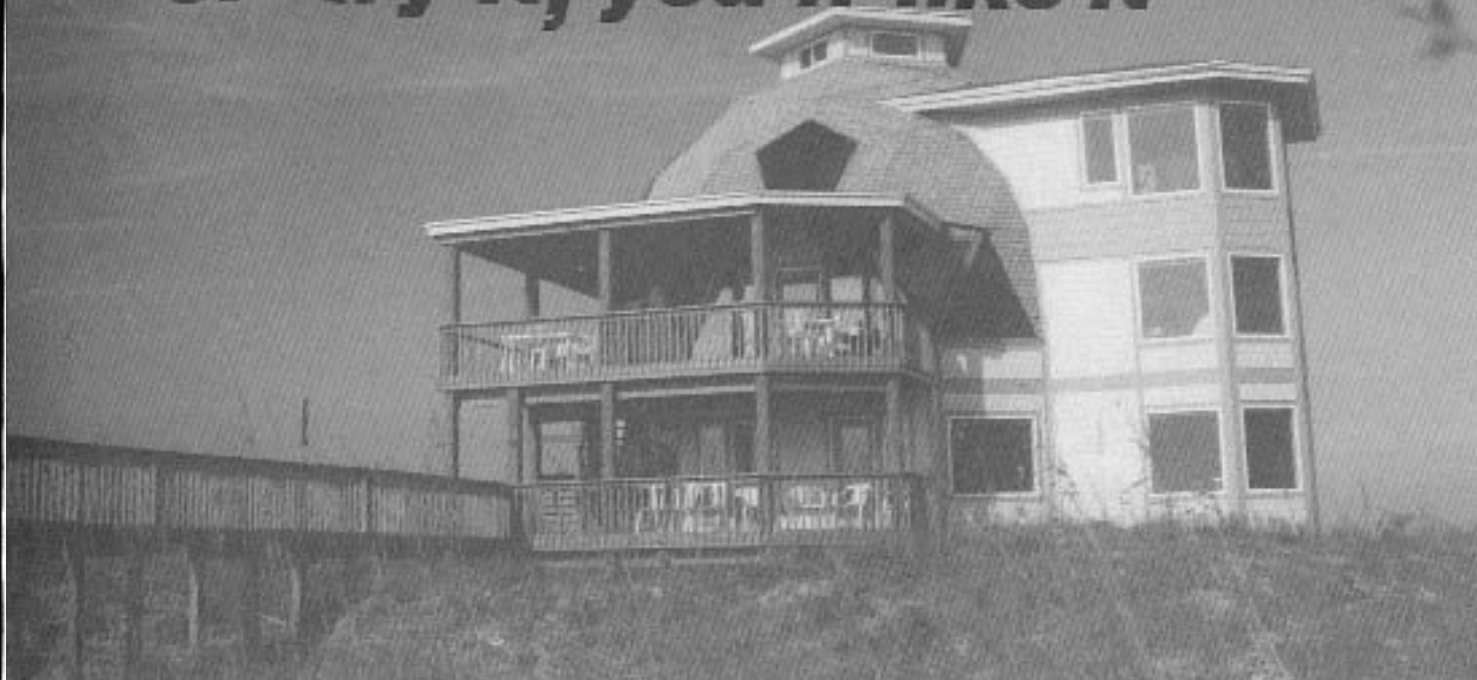
THE HOMES ARE LOCATED IN MPLS., ST. PAUL, UP TO NORTH BRANCH, MINN. YOU ARE GIVEN A DETAILED MAP. YOU DRIVE YOURSELF AND BEING ON YOUR OWN, YOU CAN SPEND AS MUCH TIME LOOKING AT THE DOMES THAT APPEAL TO YOU THE MOST.

THE DOMES ARE OPEN FROM 9:30 AM TO 4:30 PM. THE OWNERS ARE PRESENT AT EACH OF THEIR HOMES. THERE ARE NO SALES PEOPLE PRESENT EXCEPT AT OUR MAIN OFFICE MODEL DOME.

OUR TOURS DRAW RAVE REVIEWS FROM THOSE THAT ATTEND. THE MOST OFTEN HEARD COMMENT IS THAT INSTEAD OF SEEING ONE HOME EVERY MONTH OR SO AND FORGETTING WHAT EACH ONE WAS LIKE, YOU ARE ABLE TO VIEW MOST OF THESE UNIQUE DOME HOMES IN THE SAME DAY, ENABLING YOU TO MAKE INTELLIGENT COMPARISONS.

rent a dome

or 'try it, you'll like it'



IMAGINE WALKING OUT THE DOOR OF YOUR DOME, ACROSS THE SAND DUNE ON YOUR OWN PRIVATE WALKWAY, ARRIVING ON THE WARM SANDY BEACH AND YOUR OWN PART OF THE ATLANTIC OCEAN. YOU CAN BE A PART OF THIS PICTURE BY RENTING OUR BEACH DOME FOR A WEEK.

A TRULY WONDERFUL VACATION WILL BE YOURS IN THIS 38' DIAMETER HIGH PROFILE WITH 3500 SQ. FT. OF SPACE. THE 2 STORY GREAT ROOM HAS A 40' WIDE PANORAMIC VIEW OF THE OCEAN. FROM THE CUPOLA/SKYLOFT 50' ABOVE SEA LEVEL, YOU CAN SEE IN ALL DIRECTIONS AND LOOK DOWN ON THE PELICANS FLYING BY.

LOCATED ON THE BEAUTIFUL 26 MILE LONG TOPSAIL ISLAND OFF THE SOUTHERN COAST OF NORTH CAROLINA, USA.

TOPSAIL IS AN ISLAND WITH UNCROWDED BEACHES, FISHING PIERS, NEARBY GOLF COURSES AND WARM SUMMER AND FALL OCEAN TEMPS.

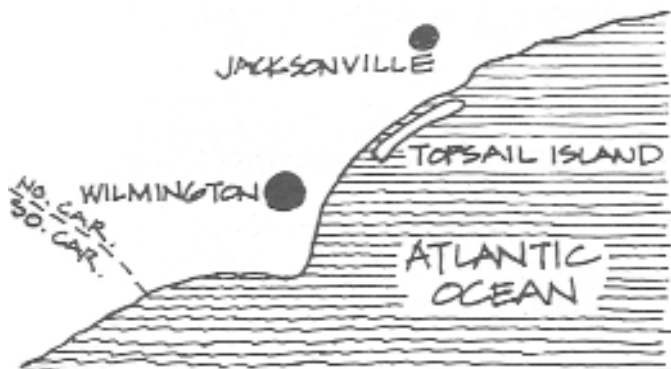
THIS DOME WAS DESIGNED FOR LARGE FAMILIES OR SEVERAL COUPLES TO VACATION TOGETHER PROVIDING PRIVATE SPACES AS WELL AS COMMUNAL SPACES ABLE TO HANDLE MANY PEOPLE.

THE BEACH DOME HAS 6 LARGE BEDROOMS, 5 FACING THE OCEAN WITH 3 OF THEM OPENING ONTO DECKS. THE THIRD FLOOR MAIN BEDROOM HAS A 2 PERSON JACUZZI WITH OCEAN VIEWS AND ITS OWN PRIVATE DECK. THE LARGE 3RD FLOOR FAMILY ROOM CAN SLEEP 4 MORE, BRINGING THE SLEEPING TOTAL TO 16-18.

WE HAVE A HUGE KITCHEN, FULLY EQUIPPED WITH DINING AT A CENTRAL TABLE SEATING 10, A RESTAURANT BOOTH SEATING 4 WITH OCEAN VIEWS AND A COUNTER WITH 3 SODA FOUNTAIN SWIVEL STOOLS.

OTHER AMENITIES INCLUDE 4 BATHROOMS, TWO 10X30 COVERED DECKS, TRIPLE ZONED CENTRAL AIR CONDITIONING, 2 LARGE WINDOW SEATS, 4 COLOR CABLE TVS, 2 VCRS, AM/FM STEREO, CEILING FANS IN EACH BEDROOM - ENOUGH STUFF FOR A GOOD SELF-INDULGENT VACATION.

SEE US AT: WWW.BEACHDOME.COM



dealers

WE HAVE A SMALL GROUP OF AUTHORIZED, INDEPENDENT DEALERS IN VARIOUS PARTS OF THE UNITED STATES. THESE DEALERS HAVE FABRICATED AND CONSTRUCTED DOMES AND CAN OFFER YOU THEIR PERSONAL EXPERIENCE AND EXPERTISE.

SOME OF THESE DEALERS PURCHASE OUR PATENTED NATURAL SPACES DOME CONNECTOR KIT AND PRODUCE OUR SHELL KIT ON A LOCAL BASIS. THIS CAN SAVE YOU SUBSTANTIAL SHIPPING COSTS. MOST OF THEM ALSO OFFER CONTRACTING SERVICES ENABLING YOU TO GET EXPERIENCED LOCAL ASSISTANCE IN COMPLETING YOUR DOME.

WE ENJOY A DEALER NETWORK WHO BELIEVE IN OUR UNIQUE DOME BUILDING SYSTEM. WE'RE PROUD TO RECOMMEND THEM TO YOU.

FOREIGN AND OVERSEAS SHIPMENTS OF OUR COMPLETE DOME SYSTEMS CAN BE EASILY ACCOMMODATED IN OCEAN-GOING CONTAINERS. UNLOADING IS SIMPLE, IF THE OWNER PURCHASES THE CONTAINER, MAKING IT INTO AN ON-SITE WORKSHOP.

SHIPMENTS OF OUR DOME SYSTEMS IN THE CONTINENTAL U.S. ARE HANDLED IN CLOSED, 53 SEMI-TRUCK TRAILERS. RATES ARE BASED ON MILES, NOT WEIGHT. SEE OUR PRICE LIST.

NATURAL SPACES DOMES WILL CONTINUE TO PROVIDE AND SERVICE DOME STRUCTURES WELL INTO THE FUTURE. DENNIS ODIN JOHNSON AND HIS FIANCEE, TESSA HILL, HAVE A CLEAR AND DEDICATED MISSION TO LEAVE THIS EARTH IN A HEALTHIER, MORE NATURAL STATE THAN WHEN THEY ENTERED. DENNIS' SON, ERIK, WORKS FULL TIME AT NATURAL SPACES DOMES. TESSA'S DAUGHTER, KARINA, WORKS PART TIME DURING COLLEGE SUMMERS. JIM, NANCY, DICK, DARREN, AND THE OTHER HARDWORKING, EXPERIENCED STAFF ARE DEDICATED TO MAKING SURE YOU GET PERSONAL ATTENTION, WHETHER YOU ARE CURIOUS OR SERIOUS ABOUT DOMES. WE THINK THAT IS THE LEAST YOU DESERVE.



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Natural Spaces Domes

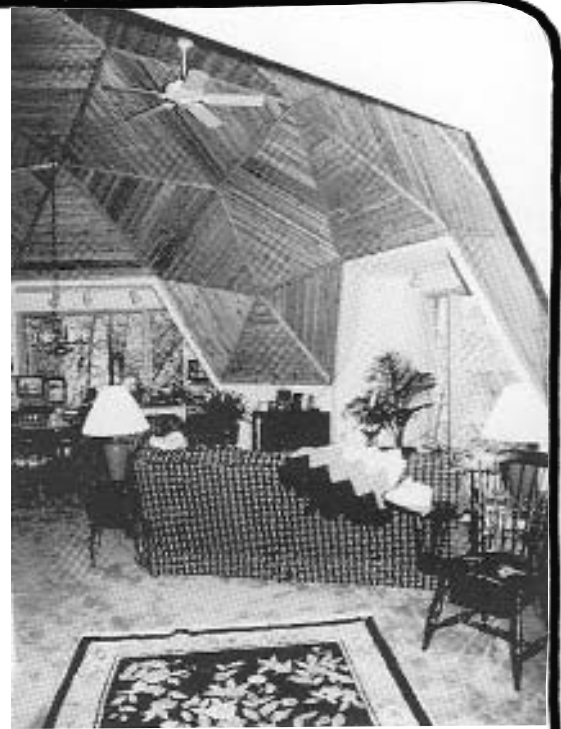
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THANKS TO ALL
OUR WONDERFUL
CUSTOMERS FOR
LETTING ME TAKE
PICTURES OF ALL
THEIR GREAT DOME
HOMES - D.O.J

