

See the light.



FARMER BOY[®]

DAY  **STAR**[™]
High Performance Natural Lighting Systems



FARMER BOY[®]

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DAY STAR™

High Performance Natural Lighting Systems

YOU KNOW A TRUE SOLUTION WHEN YOU SEE IT.

From sustainable energy to longterm finances and well-being, you want to maximize every day with a singular solution.

It's called daylighting, or the use of free, abundant sunlight to light homes, schools, factories, hospitals, offices and other structures. Our DayStar engineers have developed high-performance skylight systems that capture the sun's natural light to diffuse a broad, even pattern of indoor illumination. The results are astounding. Our technology has been studied and perfected, and daylighting makes more sense than ever.

Take a look at electric imitations of natural light. Depleting natural resources, challenging your profits, and affecting general health, these systems are undeniably costly. The ceaseless demand and unpredictable prices for oil and natural gas compound the problem. When a so-called solution takes a toll, it's time to reconsider and improve.

Read on to see the science behind our DayStar high-performance natural lighting systems and what our current clients are saying. Whatever your priorities, you'll find DayStar helps realize the full potential of your building.



DayStar high-performance natural lighting systems have been installed in over 35 states, Canada, Mexico, Taiwan, Ireland and Puerto Rico.



MAXIMIZING EVERY DAY

DAYSTAR NATURAL LIGHTING SYSTEMS

provide brilliant, even illumination regardless of building size. In fact, DayStar's light-harvesting method actually extends daylit hours every day of the year by collecting and dispersing more natural light during early mornings and late afternoons than any other daylighting system. The result is superior illumination with little to no need for electric lights.

Without compromising visible light transmittance (VLT), Daystar systems have over two times the thermal efficiency rating of common double-glazed dome skylights. Both U value and solar heat gain co-efficient (SHGC) ratings further differentiate DayStar systems, with numbers as low as .233 U value and .41 SHGC. These low numbers translate to less heat loss in the winter, less heat gain in the summer, and a lighter load for your HVAC system.



NEW

DayStar matches your roof color with a super-durable, weather- and UV-resistant powder coat finish on all metal roof systems.



HOW IT WORKS

1 DOME

Sunlight is gathered and diffused through an ultra-clear outer dome and inner collimation dome lens.

2 ROOF CURBS

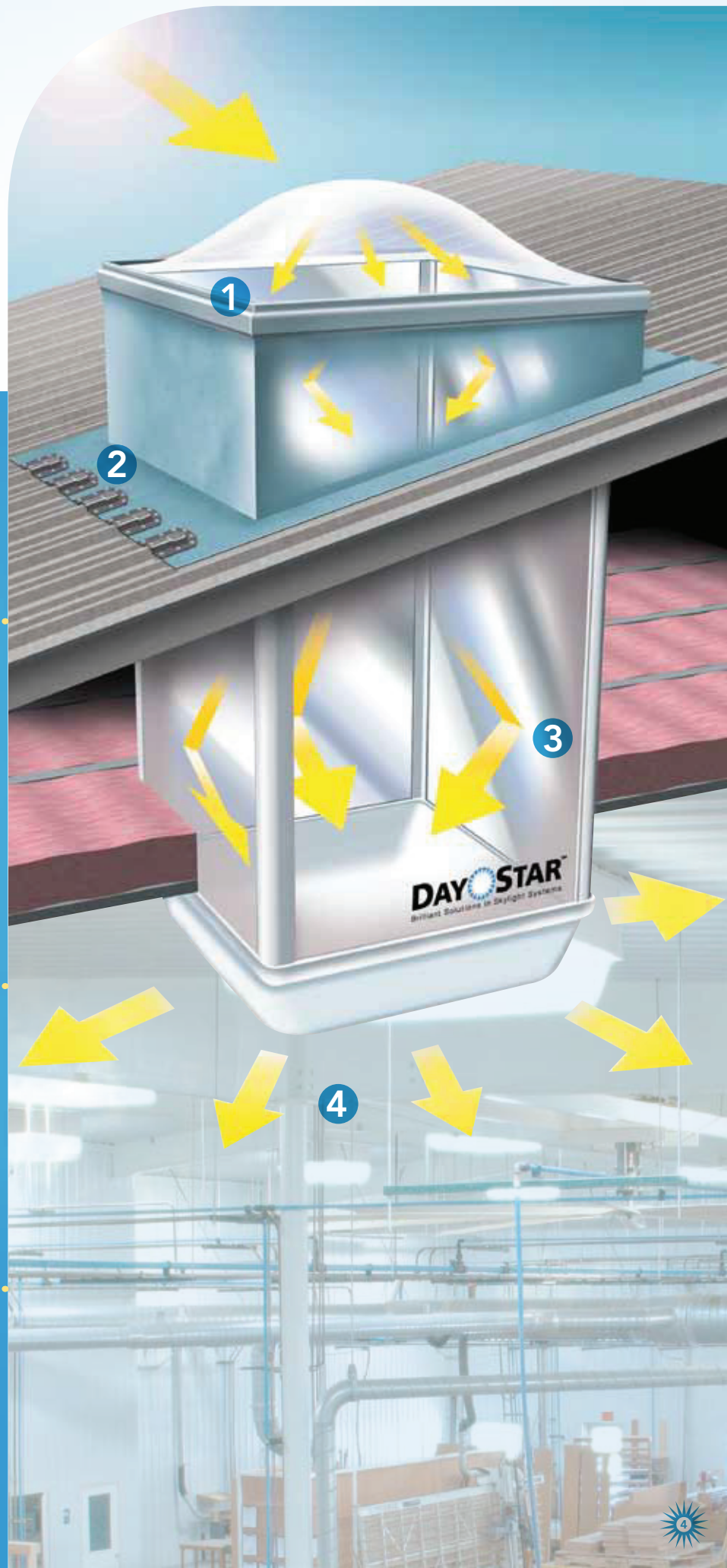
Insulated roof curbs of galvalume steel feature continuously welded watertight seams. Curbs can be fitted to almost any roof pitch and metal rib design. For perfect curb to roof color matching and added durability, we apply a unique powder coat finish that's now standard on all DayStar systems.

3 LIGHT SHAFT

Insulated panels with highly reflective interior surfaces amplify light as it's captured. Aesthetically appealing in open environments, these shafts require no attic support walls and are available in custom lengths.

4 CEILING LENS

Engineered to diffuse highly concentrated light into a broad lighting pattern, these fixtures are equal parts attractive and effective.



QUALITY OF LIGHT

DayStar's high-performance natural lighting systems bring a full spectrum of practical benefits associated with superior illumination.



Whatever your priorities, you'll find DayStar helps realize the full potential of your building.



ENERGY CONSERVATION & EFFICIENCY



OPERATING COSTS



HEALTH & WELL-BEING



MORALE & PRODUCTIVITY



MERCHANDISE APPEAL



INCREASED PROPERTY VALUE

▶ **MUSKEGON CAREER TECH CENTER
MUSKEGON, MI**

- TEN 4' x 4' UNITS INSTALLED
- "Even when I come into the building at night there is still illumination from the skylights provided by the moon and stars. We just can't believe how much light there is, even at night."
- – Mike Carpenter





ENERGY CONSERVATION & EFFICIENCY

Natural light maximization via engineered daylighting systems can reduce daytime energy consumption.

DayStar systems utilize sunlight, perhaps the most readily available source of renewable energy. In the quest to imitate natural light, artificial lighting systems have accumulated high price tags. Even so, daylighting systems remain an exemplary method for reducing dependence upon fossil fuels, simultaneously cutting harmful emissions.



OPERATING COSTS

Natural light is free of cost, year after year.

DayStar systems utilize an energy source that is not only renewable but free. Harnessing natural light not only cuts the cost of generating artificial lighting, but reduces collateral expenses. For instance, artificial light creates greater heat loads, which must be offset by a building's cooling system. With DayStar's thermal design, energy and cooling costs can be reduced by 50%. Tax credits also frequently incentivize the dollars-and-cents side of daylighting. All in all, the typical payback period on a DayStar system is three to six years.



HEALTH & WELL-BEING

Natural light supports human health.

DayStar systems deliver natural light to the spaces humans have constructed for daily life. Studies prove that natural light has a positive influence on physical and emotional health, particularly in terms of regulating circadian rhythm. Bringing sunlight inside hospitals, schools, libraries, and homes simply makes sense.



MORALE & PRODUCTIVITY

Natural light promotes improved employee attitudes and attendance rates.

Daystar systems contribute to employee health and happiness. Related studies go as far to suggest that students perform up to 25 percent better in classrooms with skylights or natural lighting. From workplace pride to improved concentration and safety ratings, better company culture can be expected.



MERCHANDISE APPEAL

Natural light accentuates product packaging and displays.

Daystar systems collect full-spectrum light, which heightens perceived product quality as well as presentation with amazingly vivid illumination. Studies show that retail sales increase when natural lighting is used.



INCREASED PROPERTY VALUE

Natural light can enhance a building's overall value.

DayStar systems are a sensible investment. Natural light is an important element in architectural design, and its presence or absence may influence the renting decisions of prestigious tenants who are familiar with the numerous environmental, economic, health and psychological benefits of natural light.

BRIGHTER



RETAIL

Natural light has been shown to raise sales by major margins, with retailers reporting 25 to 50 percent increases after installation. Whether comparing a daylit store to its previous performance or to companion locations using artificial lighting alone, the numbers simply look better.



"We really enjoy working in the brighter building. Plus, we have experienced an energy savings by reducing our cooling costs because we no longer have the heat from the lamps."

– Emanuel Kaufman

BB'S GROCERY - NEWBURG, PA



ENHANCING PERCEPTION

Customers continually comment that daylit stores seem bigger, brighter and cleaner – all of which are reasons to return to a retailer. The sun's naturally occurring full-spectrum light sheds these benefits. In clothing stores, color saturation and differentiation becomes clearer. In grocery stores, produce displays that yellowed under artificial light immediately regain attractive, inherent hues. Natural light is simply a natural salesman.



SEE THE SOLUTION



LAKELAND COLLEGE MATTOON, IL

4' X 4' UNITS INSTALLED IN THE STUDENT STUDY HALL

"We are saving [every day] in electricity bills. I have also noticed that the students spend more time in that area of the school than in any of our other study areas."

– Joe Tilman, *Electrical Engineer*

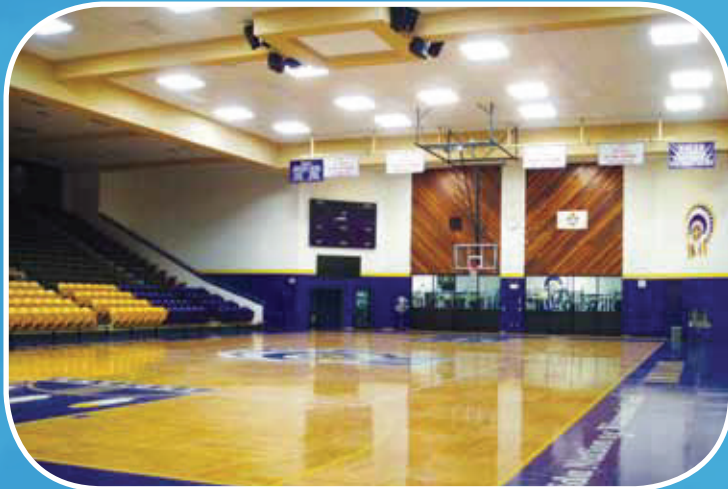


MERCER CO. AMBULANCE PRINCETON, MO

EIGHT 4' X 4' UNITS INSTALLED IN AMBULANCE FACILITY

"In the past, we had skylights. Meaning there was no insulation in certain parts of the ceiling and the fiber glass panels let in some light. It was simply pitiful. Our DayStars are such a vast improvement over what we had it is remarkable. You make a fantastic product and we have recommended you to several different people."

– Shane Grooms



HASKELL INDIAN NATIONS UNIVERSITY LAWRENCE, KS

125 UNITS INSTALLED THROUGHOUT CAMPUS

"The skylights have made such a vast improvement in the gym that the students and faculty almost feel like they're exercising outdoors. That's how great the lighting is. The natural lighting is so much more pleasing to the eye than the yellowish fluorescent lights."

– Facilities Manager



MIDWEST WOODWORKS KALONA, IA

SEVENTEEN UNITS INSTALLED IN 10,000 SQ. FT. SHOWROOM

"Having DayStar Daylights has been wonderful. With fluorescent lighting, my eyes would get very tired, but they don't have to strain now that we are using Daystars. The customers have commented on how bright the lights are and I expect these lights will pay for themselves. I highly recommend the DayStar System."

– Marlin Gingerich, *Owner*





“Conserving our resources is vital, and our skylights help reduce our electrical lighting use by 83% – a huge savings – while creating a beautifully bright space. We save energy, money, and offer an inviting space customers return to time after time.”

– Joe Terrell, Owner, Satisfied Daystar Customer

DENNY'S RESTAURANT • JOLIET, IL
SIX 4' X 4' UNITS INSTALLED

DAYSTAR SYSTEM COMPONENTS

DayStar high-performance natural lighting systems are offered as a package, complete with a fully illustrated installation manual.

No additional parts need to be fabricated or modified on the job site. DayStar supplies its systems complete with all parts including an insulated roof curb with watertight, continuous welded seams and caps to match your rib profile.

- (A) ROOF DOME
- (B) LIGHT SHAFT
- (C) CEILING LENS
- (D) WOOD CURB KIT
- (E) FLASHING KIT
- (F) RIB CAPS
- (G) MASTIC
- (H) FOAM TAPE
- (I) SCREWS
- (J) INSTALLATION MANUAL
- (K) STEEL ROOF CURB KIT



Our high-performance daylighting systems come in 4' x 4', 2' x 4' and 2' x 2' sizes. We offer more than 150 in-stock curb styles to fit shingle, metal or membrane commercial roofs with pitches from zero to 12/12. One-piece light shafts up to 16 feet long come pre-fab with corners attached. We can also custom-manufacture to specifications.

DAYSTAR PRODUCT WARRANTY

ROOF DOME WARRANTY *20 year warranty (Non transferrable)

Approved CC-2 Plastic - I.C.B.O. Report Nos. 1084/1990
Skylight I.C.B.O. Report Nos. 4063
L.A. City Code No. RR-24785

LIGHT SHAFT REFLECTIVE SURFACE WARRANTY

25-year warranty on aluminum surface not to darken
or break down when exposed to light.

All other parts of the DayStar System are warranted against defects in materials and/or workmanship for a period of one year from date of purchase. Warranty limitations include damage caused by misuse, alterations, accidents, or certain weather conditions. Liability of DayStar shall not exceed the original purchase price of the defective unit exclusive of shipping expenses and installation costs.

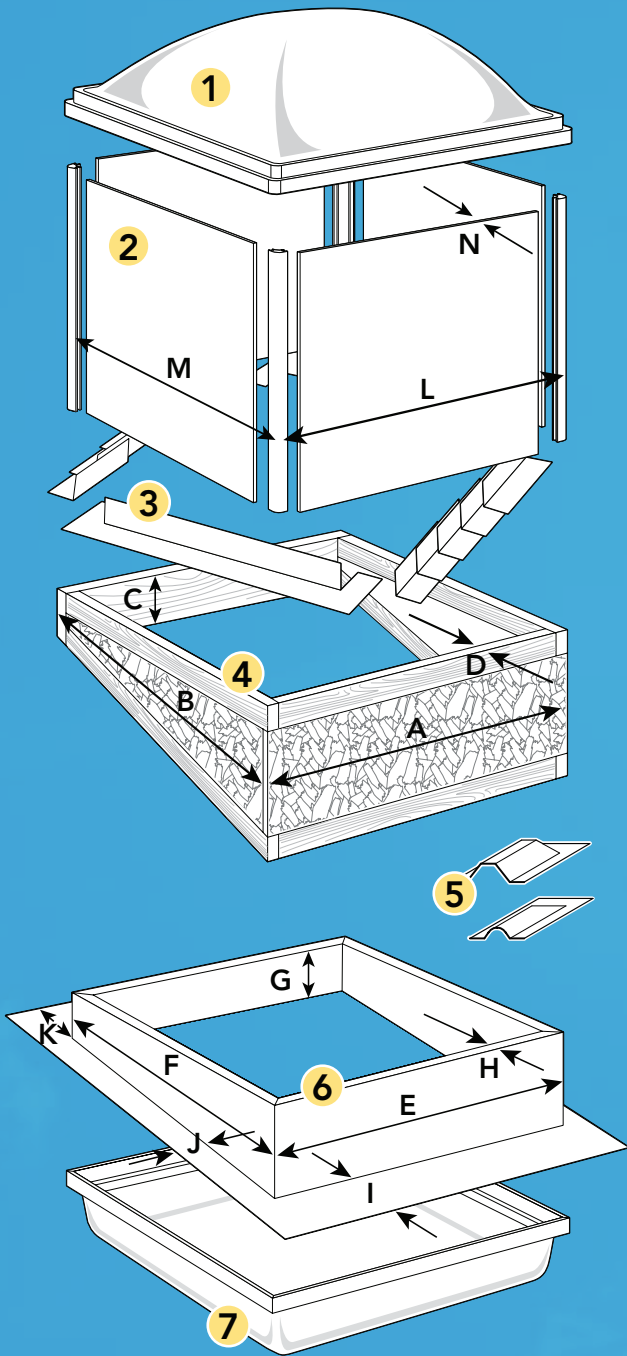
NOTE: Do not use products that contain ammonia or petroleum bases to clean the roof domes. When cleaning becomes necessary, first hose off large particles of dirt then use a solution of mild soap and water with a soft cotton cloth.

**Dome Warranty is void if not installed with DayStar curbs, light shafts and lenses.*

DayStar Systems, LLC. 14226 Hwy. 4 | Campbell Hill, IL | 62916

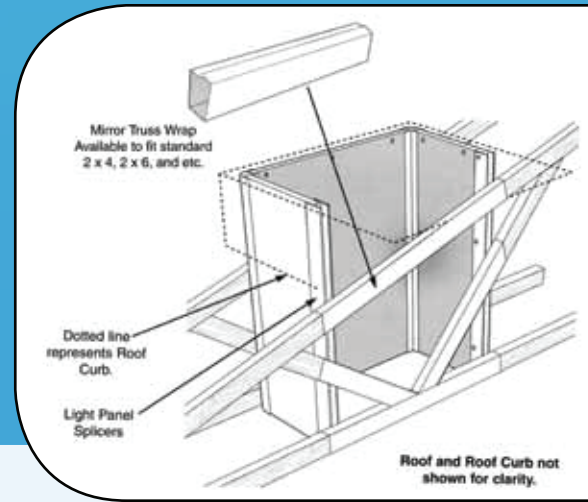


SYSTEM SPECIFICATIONS



- 1 ROOF DOME**
- 2 LIGHT SHAFT KIT**
- 3 FLASH KIT**
FOR WOOD CURBS
- 4 WOOD CURB KIT**
SHIPPED KNOCKDOWN - FOR SHINGLE ROOF INSTALLATION
- 5 RIB CAPS**
AVAILABLE FOR ANY RIB PROFILE
- 6 METAL ROOF CURB**
FOR METAL ROOF INSTALLATION
- 7 CEILING LENS**

4' x 4' units can be installed in roofs with 2' OC truss spacing. Refer to DayStar installation manual for instructions.



SPECIFICATION GUIDELINES

MODEL/SIZE	WOOD CURB (in inches)				METAL CURB (in inches)							LIGHT SHAFT (in inches)		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
2828 – 2' x 2'	25 1/2	25 1/2	8	1 1/2	26	26	8	1 1/2	6	4	6	22 7/16	22 7/16	3/4
2852 – 2' x 4'	25 1/2	50	8	1 1/2	26	50	8	1 1/2	6	4	6	22 7/16	46 1/2	3/4
5252 – 4' x 4'	49 1/2	50	8	1 1/2	50	50	8	1 1/2	6	4	12	46 1/2	46 1/2	3/4

Note: The wood curb is designed so that the curb sides sit directly above trusses with a 24" or 48" OC spacing.

Note: Conventional curbs are available for builtup or membrane roofs. Dimension I, J and K for conventional curbs is 2" or can be custom made to roofer's specs.

GOT A QUESTION?

Call us toll-free at 866-7-DAYSTAR or contact your local dealer.

FREQUENTLY ASKED QUESTIONS

Are DayStar systems easy to install or is a special contractor required?

We make a point of supplying DayStar systems with all parts – from rib caps to fit your rib profiles to mastic and screws. No additional parts need to be fabricated or modified on the job site. Our fully illustrated, step-by-step installation manual keeps it simple. Generally speaking, anyone with the ability to install a roof is equipped to install a DayStar system. Read the installation manual before you begin. For any questions, we're just a phone call away. If you hire out, we'll act as a resource for your contractor.



Fully illustrated installation manual gives step-by-step instructions. Easy for do-it-yourselfers or construction crews.

What about leaks?

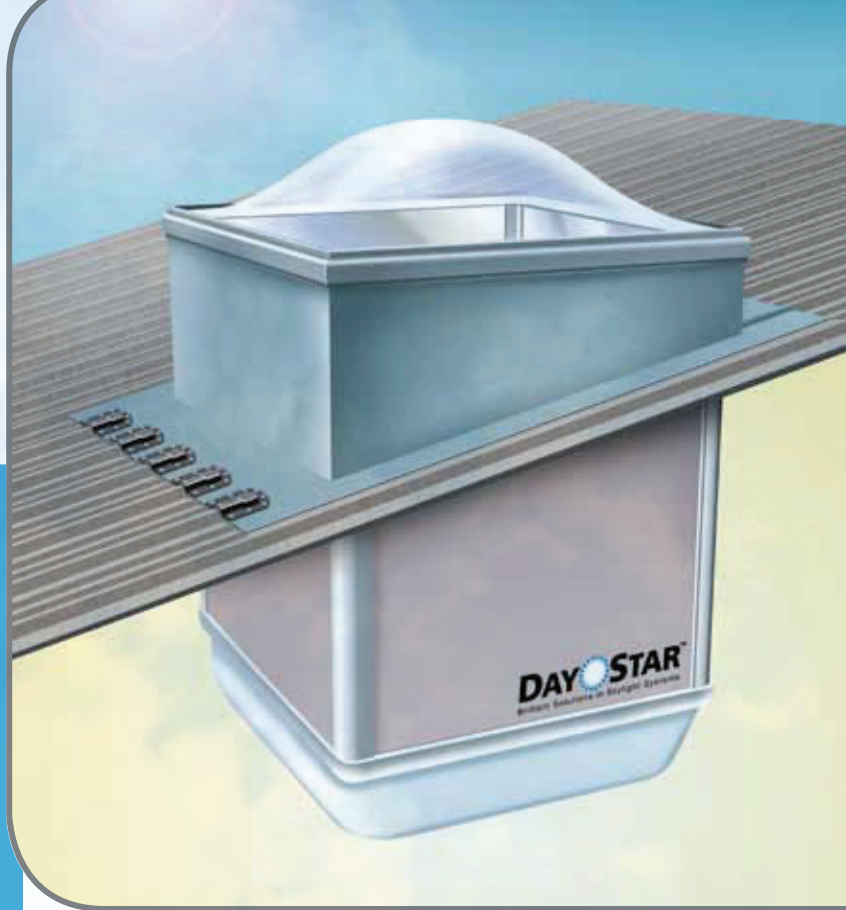
Leaks are easily avoided when installed according to our installation manual. We supply the rib caps to fit your roof panel as well as the mastic sealant to be applied between the roof curb flange and roof metal. This installation method is proven by thousands of successful DayStar system installations in over 35 states and abroad. Atop that, our standard powder coat finish is an industry innovation that extends the life of each curb.

What about warranty?

There is a 20-year warranty on the top dome, a 25-year warranty on the light shaft reflective surface, and a one-year warranty for all other parts.

What is the turnaround time for DayStar Systems?

Our vast inventory of parts and in-house manufacturing/painting capabilities allows us to ship even large orders quickly. We generally recommend ordering three weeks before your intended in-hand date, but if your timeline is tighter, just let us know.



HOW MANY DO I NEED?

DayStar systems are specially engineered to meet most roofing specifications and applications, including those regularly used for manufacturing plants, retail stores, schools and office buildings.

Based upon actual test results, the Daystar formula makes it easy to calculate your lighting need.

TYPICAL LIGHTING LEVELS

NUMBER OF SQ. FT. PER 4 x 4 SKYLIGHT UNIT

50-60 Foot Candles - Retail Stores	457
25-40 Foot Candles - Manufacturing Areas	640
15-20 Foot Candles - Warehouse Areas	914

Since conditions vary according to ceiling height, brightness of walls, ceiling, floors and weather conditions, this table is based on average conditions. For applications with extra dark ceilings, floors, contents or ceilings over 20 ft. high, more skylights may be needed to achieve the desired light level.

FOR ARCHITECTS & ENGINEERS

DayStar can provide IES files for projects requiring engineered lighting design. These files are the result of DayStar system tests conducted by an independent lighting lab.

Written specs and CAD files for architects and specifiers are also available.





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