

# N·E·X·U·S

HYBRID INDOOR GREENHOUSES



Lakeview Healing House



District 8



Durango Organics



Durango Organics

# NEXUS SYSTEM 420™ HYBRID GREENHOUSES

As a horticulture industry leader for 50 years, Nexus helps clients design the best possible growing system using the latest technology. This consultation involves assessing the project's geographic location and integrating heating/cooling, light deprivation, lighting, environmental controllers, benches, insect screening, odor control, and much more to create a systematic and productive growing approach.



## STRUCTURES/COVERINGS ◀

Nexus structures are U.S. manufactured from galvanized steel. These structures contain fabricated steel components with factory-welded trusses and pre-drilled purlins for ease of construction. Customized, trussed roof systems are designed by Nexus engineers to meet municipal building codes including geographic-specific snow and wind loads.

A variety of coverings are available with a range of light transmitting and diffusing capabilities. Side and end walls may feature insulated metal panels to increase energy savings and provide security.

## LIGHT DEPRIVATION ▶

Prolonged periods of consistent darkness are nature's trigger for marijuana flowering. To induce flowering, plants need to be placed under 12 hours of darkness along with 12 hours of light each day. This process can be managed using side walls and curtains along the roof of a greenhouse in combination with light trap filters on ventilation equipment.

These curtain systems conserve heat by reducing operating costs through increased energy efficiency. The grower will also have extra harvests over outdoor growing.



## LIGHTING ◀

Greenhouse cannabis production provides the opportunity to capture and utilize nature's sunlight. Natural light helps maximize plant production and decrease operating costs due to less supplemental lighting.

Supplemental light is often necessary on low light days, and separate growing zones require different levels of accumulated light. These lighting systems ensure consistent light levels for year-long production and extra crop turns.

## HEATING/COOLING ▼

Heating primarily occurs with overhead gas-fired heaters with vertical or horizontal air fans that circulate warm air throughout the greenhouse. Hot water radiant heat can be added closer to the plant either under benches or imbedded in the greenhouse floor.

Cooling systems provide cannabis crops with healthy growing temperatures during the summer months even in desert or high humidity conditions. These systems include evaporative fan and pad mechanical cooling, natural ventilation with roof and side vents, shade curtains, and dehumidification systems.



## ENVIRONMENTAL CONTROLS ▲

Effective climate control is a crucial step towards producing any greenhouse crops particularly cannabis. The environmental climate control system's design needs to consider outside conditions along with indoor readings to create the best possible environment for plant growth.

## ODOR CONTROL

Odor mitigation can be a major concern in populated areas. Mistig vapor units and automatic pneumatic control systems help keep growing facilities in compliance with municipal laws resulting in far fewer complaints from neighbors.

## INSECT SCREENING ▼

Minimizing insects inside a greenhouse is essential for organic growing practices. Selecting the best type of screens for specific geographic locations help create a low pest growing environment.



## ROLLING & STATIONARY BENCHES ▲

Benching systems increase overall crop yield in growing operations by reducing aisles, increasing air circulation, and improving growth management and operational efficiency. Bench systems can be covered with expanded metal or plastic trays to water plants and control run-off.

## IRRIGATION/FERTILIZATION

Let Nexus design your irrigation and fertilization systems to ensure proper nutrient levels reach the plant.



## WHY NEXUS?

Nexus is a cannabis industry innovator with System 420™ hybrid greenhouse designs. An in-house engineering staff, licensed in 49 states, provides customized designs for high quality greenhouses. Headquartered in Colorado, the epicenter of the cannabis market, Nexus has two manufacturing facilities located in Colorado and Illinois for convenient delivery to the entire U.S. Over the past 50 years, Nexus has served the horticulture industry with technical expertise, exceptional customer design, and product leadership.



Nexus provides multi-use structures for drying, trim, mother plants, cloning, shipping, receiving, and administrative offices.

