




DESIGNED TO EARN THE ENERGY STAR

The estimated energy performance for this design meets US EPA criteria. The building will be eligible for ENERGY STAR after maintaining superior performance for one year.



The Monarch School

The Monarch School serves students with neurological differences, changing lives from the inside out. Environmental education plays a central role in empowering students to become grounded and connected. Daylighting strategies were introduced into the Chrysalis Building in spite of the fact that both vision and daylighting windows are highly atypical of spaces for students with hypersensitivity. Yet by understanding exactly what qualities of light trigger negative responses, we were able to provide daylighting as well as a high degree of control over both natural and artificial light sources.

PROJECT INFORMATION

Location: Houston, Texas
 Space Type: PreK - 12 School
 Total Square Footage: 24,720 SF
 Energy Cost/Square Foot: \$.84

Energy Star design rating: 86
 Energy Use Intensity: 98 kBtu/sf/yr
 Percent CO2 Reduction: 33%
 Energy Savings: 1,200,000 kBtu
 CO2 Savings: 64 metric tons

LEED Rating: Gold Certified
 Recycled Content: >35%
 Regional Materials: >35%

DESIGN ELEMENTS

- Minimal high-efficiency lighting on interior and exterior
- Task lighting
- Daylighting in classrooms and common areas
- Light shelves
- Exterior shading through porches and overhangs
- Insulated low-e windows
- Cool roof
- Low-emitting materials
- Campus chilled water
- Enhanced refrigerant management
- High-efficiency HVAC equipment
- Variable air volume fans
- 100% renewable power provider
- Low-flow plumbing fixtures
- Dual flush toilets
- Designed for rainwater harvesting
- Commissioning of building



CHRYSALIS SECOND FLOOR PLAN

1. Common Area
2. Classroom
3. Sensory Room
4. Computer Lab
5. Respite Room
6. Intervention
7. Music Therapy
8. Group Therapy
9. Office
10. Waiting Room
11. Observation
12. Workroom
13. Storage
14. Library
15. Science Lab
16. Computer Lab
17. Assembly



CHRYSALIS FIRST FLOOR PLAN



JACKSON & RYAN ARCHITECTS