

# DIRTT GREEN LEARNING CENTER



## PROFILE

### SOCIETY OF ENVIRONMENTALLY RESPONSIBLE FACILITIES

**LOCATION:** 325 North Wells Street, Suite 1000  
Chicago, Illinois

**OCCUPANT:** DIRTT  
Calgary, Alberta

DIRTT's Green Learning Center (GLC) in downtown Chicago is a stunning example of what one company can do for sustainability in the indoor environment. As the Chicago display center for the Calgary-based company, the Green Learning Center of DIRTT (Doing It Right This Time) offers visitors a comprehensive view of the many ways that energy, resources, and time can be saved when using their construction alternatives.

Prominently located in the penthouse of the Helene Curtis building at 325 N. Wells next to the Chicago Merchandise Mart with sweeping views of the Chicago River and skyline, DIRTT's GLC demonstrates that office suites may practice and demonstrate remarkable sustainability even when contained in an older structure for which massive sustainability upgrades are, currently, uneconomical.

The DIRTT Chicago GLC not only houses offices, a bistro, and a sweeping center space, but also display areas that show exactly how their walls, data, millwork, and power products all come together in a variety of settings: hospital, laboratories, offices, and even patient rooms. DIRTT's GLC staff also enjoys the company's spin on a modular living wall system – Breathe. Breathe initially or retroactively attaches to DIRTT Walls or conventional walls. Straightforward plumbing eliminates the need for complex hydroponic systems; watering is achieved using self-contained pipes and troughs that use gravity to send water through the

system. Wicks in each pot allow plants to absorb only what they need. After the last pot, any remaining water is captured, so standing water isn't an issue. Each plant has its own housing pod so that if one plant is damaged or ill it can simply be replaced without spreading the illness to other plants.

The demountable wall system that is characteristic of DIRTT interiors features prominently in the Green Learning Center, where DIRTT walls alone support all of the bistro appliances and display structures. The data, power, and millwork in the Learning Center are also characteristic DIRTT products.

These solutions allow the Green Learning Center to be a dynamic and flexible example of what interiors can be without drywall construction, deconstruction, and all of the material being sent to landfill. Additionally, all medium density fiberboard used by DIRTT is 100% recycled material, and DIRTT also offers the clients the option to use sustainably forested wood.



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DIRTT prides themselves on their ability to provide agile rapid construction solutions that are as sustainable as they are easy to work with. With standard construction, there are inherent limitations, with time, resources, and energy required to make even the smallest changes – such as adding outlets or data connections. Additionally, the rapid construction features of DIRTT make it easy to include technology and pieces of equipment that are specific to the room. For example, shelves and chairs might be integrated into the DIRTT walls at one point while that room is a lobby, but could be switched to flat screen computer monitors and television screens when that room is used for something different.



Power and data are easily integrated into the wall systems, with DIRTT offering plug-and-play solutions including DIRTT Networks and DIRTT Power. A display area in the Green Learning Center shows (through clear glass) just how much data and power can be included with only minimal – and rapid – changes to the wall systems. Rather than spending thousands of dollars on a screen specifically fitted to a singular wall, any item of technology can be easily fitted to the walls and the power and data can be linked just as easily. This easy assembly not only saves time and labor resources, but also adds flexibility to the space in terms of the other materials normally included.

DIRTT interiors also allow entire spaces to be carpeted wall-to-wall, because unlike traditional drywall partitioning,



DIRTT walls rest over floor covering and can be disassembled and reconfigured easily. There is no damage to the floor or ceiling (where the walls simply clip in) and the space can be reimagined again and again.

All customizations and changes are made with the comprehensive software system that DIRTT uses for every order. ICE® software allows the client to view interactive, graphical representations of what the design would look like with each new addition or modification. Additionally, every change is reflected in a dynamic budget total, so the



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client can keep themselves and everyone on the design team (architects, general construction personnel, tenants of the space, and business partners) included in the decision making process **before** the product is purchased.

Every single detail in the design can be chosen before production, visualized through the 3D software fly-through, and then sent to all concerned parties immediately via a simple Java file – without a single piece of paper printed and with weeks of work saved. The product ships within a month, and can be assembled easily on site.



An equally innovative supplement to ICE® is a software tool called ICEberg®. ICEberg® is an objective apples-to-apples tool for comparing the cost of conventional construction with modular interior construction. It takes the end-user's exact design and calculates the prices and possible tax implications of the two methods of construction on the same project, and based on the resource cost in the region, the cost of union labor in region, and the specific overall cost of construction. It also features a revolutionary sustainability tool termed simply, "The R's." This tool explains the factors and ramifications of construction on the environment, and compares the carbon footprint, landfill contributions, pollution implications, and other aspects of traditional construction versus DIRT construction.



This educational tool exemplifies DIRT's legacy of **Practical Environmental Stewardship**™ – not only are their clients offered agile rapid construction solutions that are environmentally responsible, but they are educated as to how and why their actions are relevant to the environment. The R's discusses the specific choices that the client has made with their product, and even suggests options (such as planting trees or cleaning natural areas) to offset the environmental effect of their construction.

DIRT's Green Learning Center in Chicago is an excellent case of how one company can energize their own office suite with a solution that they proudly stand behind. DIRT's products and their ability to revolutionize contemporary construction give great credibility to **Practical Environmental Stewardship**™ and the effect that good business choices can have on both client interests and the environment.

Prepared in cooperation with  
Environmental Economics and Policy  
at  
MICHIGAN STATE  
UNIVERSITY

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**SERF** makes environmental certification affordable and more accessible to building owners, managers and developers. SERF leverages its certification program to advance the concept of *Practical Environmental Stewardship*.™

**SERF** affirms that with private property rights come *responsibilities* – not least of which are the responsibilities to construct, rehabilitate, and operate our homes and facilities, enhance our communities and minimize environmental impact.

**SERF** recognizes that protection of our environment is the duty of every steward of the land, and such stewards who act accordingly should be recognized and encouraged.

**SERF** holds that honest cost-benefit analysis should be applied to building improvements and systems intended to help the environment. To endure, sustainability must be affordable.

**SERF** is an inclusive organization which provides live and online forums for members to share methods to cost-effectively meet our goals.

**SERF** builds future generations of environmentally responsible property owners. Our examples and support can teach and endow future generations to live in harmony with our planet and to conserve its precious resources.

**SERF** *Catch the wave ~ get certified!*



## PRACTICAL ENVIRONMENTAL STEWARDSHIP



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