

**How DuPont™ Tyvek® Weatherization Systems* contribute to Sustainable Design
Commercial Application: LEED®-NC Rating System**

Key Attributes - Tyvek® Weatherization Systems	LEED Credits and points to which Tyvek® may contribute	How may Tyvek® contribute?	How to Verify
<p>Air Infiltration Resistance:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Tyvek® Weatherization Systems* <p>Water Resistance</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Tyvek® Weatherization Systems <p>Water Vapor Permeability</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Tyvek® Weatherization Systems <p>Durability</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Tyvek® Weatherization Systems <p>Compatible System Components</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Tyvek® membranes <input checked="" type="checkbox"/> Flashing <input checked="" type="checkbox"/> Caulks & Sealants <input checked="" type="checkbox"/> Fasteners <p>Environmental Stewardship</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Tyvek® Weatherization Systems <p>Low-VOC emissions</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Fluid Applied Tyvek® <input checked="" type="checkbox"/> Sealants & Accessories <p>Building Physics</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Tyvek® Weatherization Systems 	<p>EA: Energy & Atmosphere</p> <p>EA Prerequisite 2: Minimum Energy Performance</p> <p>EA Credit 1: Optimize Energy Performance 1-19 Points**</p> <p>EQ: Indoor Environmental Quality</p> <p>EQ Prerequisite 1: Minimum IAQ Performance Requirements</p> <p>EQ Credit 3.1: Construction IAQ Management Plan (1 Point)</p> <p>EQ Credit 4.1: Low Emitting Materials (1 Point)</p>	<p>Tyvek® Weatherization Systems can contribute towards building envelope sealing and help meet ASHRAE 90.1, 2007 requirements in Section 5.4.</p> <p>When installed per DuPont Installation Guidelines, Tyvek® Weatherization Systems can help achieve an airtight building envelope which contributes toward reducing HVAC energy use.</p> <p>When installed per DuPont Installation Guidelines, Tyvek® Weatherization Systems can help achieve an airtight building envelope to meet requirements of Sections 4 through 7 of ASHRAE 62.2, 2007: Build Tight, Ventilate Right</p> <p>Tyvek® Weather Barriers protect installed absorptive materials (<i>e.g.</i> exterior sheathing, insulation, etc.) from moisture damage during construction phase, while allowing drying of incidental moisture.</p> <p>DuPont™ Tyvek® Fluid Applied, and all sealants used with Tyvek® systems meet SCAQMD rule #1168 on VOC limits.</p>	<p>Specify Tyvek® Weather Barriers and clearly identify the air barrier on the architectural drawings</p> <p>Demonstrate percentage energy cost savings for the <i>proposed building</i> compared to the <i>baseline building</i> using Option 1, Whole Building Energy Simulations, per Appendix G ASHRAE 90.1. Input air leakage rate into energy simulations. Reference for "<i>baseline airtightness</i>": use NISTIR 7238 Study. Reference for "<i>proposed building airtightness</i>": use US Army Corps of Engineers Air barrier Standard or actual blower door test data. Contact DuPont LEED experts for details.</p> <p>Specify Tyvek® Weather Barriers and clearly identify the air barrier on the architectural drawings</p> <p>Specify Tyvek® Weatherization Systems; Include construction-related IAQ procedures in the pre-construction and construction progress meeting agenda.</p> <p>Ensure that VOC limits are clearly stated in each section of the specifications where adhesives and sealants are addressed</p>

***DuPont™ Tyvek® Weatherization Systems include:**

- Primary membranes (Building Wraps and Fluid Applied): DuPont™ Tyvek® CommercialWrap®, DuPont™ Tyvek® CommercialWrap® D, DuPont™ Tyvek® ThermaWrap™, DuPont™ Tyvek® StuccoWrap®, DuPont™ Tyvek® DrainWrap™, DuPont™ Tyvek® HomeWrap® and DuPont™ Tyvek® Fluid Applied
- Installation and continuity accessories for Tyvek® Building Wraps and Fluid Applied (FA) membranes: SA flashing, FA Flashing and Joint Compound, tapes, caulks and sealants.

**** LEED-NC version 3 (2009)**

Key Points: LEED® Green Building Rating System™ LEED® for New Construction & Major Renovations in Commercial Applications (version 2.2 - 2007 and version 3 - 2009)

LEED® -NC New Construction and Major Renovation																			
What is LEED®?	The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is a third party certification program and the nationally accepted benchmark for the design, construction and operation of high performance green buildings.																		
Who developed LEED®?	LEED® is a registered trademark of the U.S. Green Building Council (USGBC).																		
Does LEED® certify products?	No. This Green Building Rating System™ is for the design, construction and operation of high performance green buildings as well as sustainable design and construction in homes nationwide. <input checked="" type="checkbox"/> DuPont™ Tyvek® Weatherization Systems may contribute to obtain LEED® credits towards a building or home certification.																		
What is the scope of LEED®-NC?	LEED-NC (The LEED Green Building Rating Systems for New Construction and Major Renovation) provides a set of performance standards for certifying the design and construction phases of commercial, institutional buildings, and high rise residential buildings.																		
What type of Rating Systems does LEED® have?	LEED Rating System Portfolio includes: LEED -NC (New Construction) LEED -EB (Existing Buildings) LEED for Commercial Interiors LEED Core & Shell LEED for Schools, LEED for Healthcare, LEED for Retail, LEED for Homes LEED for Neighborhood development																		
What are the categories that LEED® for New Construction & Major Renovations review performance on?	<table border="0"> <thead> <tr> <th style="text-decoration: underline;">Credit Category</th> <th style="text-decoration: underline;">Max. Points LEED-NC v3</th> </tr> </thead> <tbody> <tr> <td>Sustainable Sites (SS)</td> <td>26 points</td> </tr> <tr> <td>Water Efficiency (WE)</td> <td>10 points</td> </tr> <tr> <td>Energy & Atmosphere (EA).....</td> <td>35 points</td> </tr> <tr> <td>Materials & Resources (MR).....</td> <td>14 points</td> </tr> <tr> <td>Indoor Environmental Quality (EQ).....</td> <td>15 points</td> </tr> <tr> <td>Awareness & Education (AE).....</td> <td>6 points</td> </tr> <tr> <td>Regional Priority.....</td> <td>4 points</td> </tr> <tr> <td>Maximum points</td> <td>110 points</td> </tr> </tbody> </table>	Credit Category	Max. Points LEED-NC v3	Sustainable Sites (SS)	26 points	Water Efficiency (WE)	10 points	Energy & Atmosphere (EA).....	35 points	Materials & Resources (MR).....	14 points	Indoor Environmental Quality (EQ).....	15 points	Awareness & Education (AE).....	6 points	Regional Priority.....	4 points	Maximum points	110 points
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How many points does one need to get LEED® certification?	LEED®-NC has four levels of certification: <table border="0"> <thead> <tr> <th colspan="2" style="text-decoration: underline;">LEED-NC Version 3</th> </tr> </thead> <tbody> <tr> <td>Certified:</td> <td>40-49 points</td> </tr> <tr> <td>Silver:</td> <td>50-59 points</td> </tr> <tr> <td>Gold:</td> <td>60-79 points</td> </tr> <tr> <td>Platinum:</td> <td>80-100 points</td> </tr> </tbody> </table>	LEED-NC Version 3		Certified:	40-49 points	Silver:	50-59 points	Gold:	60-79 points	Platinum:	80-100 points								
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How does the rating system for LEED®-NC work?	Project teams interested in obtaining LEED Certification for their project must first register with USGBC (www.usgbc.org) in the LEED section, under Register Your Project. As of January 2006, project teams pursuing LEED-NC certification under Version 2.2 are required to use LEED-Online. All projects will need to comply with the version of LEED-NC that is current at the time of project registration. Starting June 27, 2009, new projects have been required to use LEED v3. Starting with LEED-NC version 2.2, certification application can be split in two phases: "Design phase credits" can be submitted at the end of design phase for review by USGBC; at the completion of construction, the balance of attempted credits should be documented and submitted for USGBC review.																		
To which LEED®-NC credits DuPont™ Tyvek® Weatherization Systems may contribute?	EA: Energy & Atmosphere (<i>Performance or Prescriptive Approach</i>) EQ: Indoor Environmental Quality Please review previous table to learn about how Tyvek® Weatherization Systems may contribute in each credit category																		