

# CITYWIDE GREEN BUILDING PROGRAM

## Summary of Ordinance Requirements

Adopted April 9, 2008



# Background and Overview

- Green buildings help lower greenhouse gas emissions, improve air quality, conserve energy and water, reduce stormwater impacts, minimize waste, preserve natural resources, and enhance human health.
- This briefing presents the recommendations proposed by the Green Building Task Force (GBTf) for creating and implementing the citywide green building program that will be incorporated into the Dallas City Code
- The Dallas City Council adopted a resolution for the implementation of the citywide green building program and an ordinance establishing the green building program on April 9, 2008

# Green Building Task Force



Established in **December of 2007** with members from the residential and commercial sectors:

- American Institute of Architects
- North Texas Homebuilder's Association
- The Real Estate Council
- QUOIN
- Hispanic Contractor's Association
- US Green Building Council - North Texas Chapter
- Dallas Independent School District
- Urban Forest Advisory Committee
- Other Industry & business leaders, and
- City Staff

**Developed recommendations for:**

- Components of the green building program
- Implementation steps
- Training and education programs for the building industry

# Green Building Task Force

## Summary

The Task Force recommends a two-phase implementation strategy for the Green Building program requirements for all private developments in Dallas

Phase 1, which will start on October 1, 2009, focuses on energy efficiency and water conservation requirements for all residential and commercial developments

Phase 2, which will start on October 1, 2011, focuses on expanding the initiatives for new buildings into a comprehensive green building standard requirement

Within each Phase, the Task Force outlines a proposed implementation plan for each

# Ordinance Requirements



# Phase 1 Requirements

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**Adopted:** April 9, 2008

**Effective Date:** October 1, 2009

Divided into:

- All New Residential Construction
- All New Commercial Construction

# New Residential

## Mandatory Measures Effective Oct. 1, 2009

- **15%** more energy efficient than the 2006 International Energy Conservation Code (IECC) as shown by:
  - IC3 – Energy Systems Lab, Inc. certificate
  - HERS index of **85**, or
  - Alternatively, to prove that the **15%** requirement has been met, builders can use the following standards for compliance:
    - ENERGY STAR
    - Green Built North Texas
    - LEED H ,or
    - Approved equivalent standard

# New Residential- Cont.

- Meet at least **four** of the following water reduction requirements:
  1. The average flow rate for all lavatory faucets must be **2.0** gallons per minute
  2. The average flow rate for all showerheads must be **2.0** gallons per minute
  3. The average flow rate for all toilets must:
    - 3.1. be **1.3** gallons per flush;
    - 3.2. be dual-flush and meet the requirements of ASME A112.19.14; or
    - 3.3. meet the United States Environmental Protection Agency WaterSense specification and be certified and labeled accordingly.
  4. ENERGY STAR labeled dishwasher that uses **6.0** gallons or less per cycle
  5. ENERGY STAR labeled clothes washers with modified energy factor (MEF)  $\geq$  **2.0** and water factor (WF)  $<$  **5.5**
  6. Utilize drip irrigation emitters for all bedding areas of the landscape plan

# New Residential- Cont.

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- Requires submittal of checklist from one of the following:
  - Green Point, Green Communities, Green Built North Texas, LEED H , or approved equivalent standard

# New Commercial

## Mandatory Measures Effective Oct. 1, 2009

- For all commercial buildings < 50,000 sf:
  - 15% more energy efficient than Energy Code (2006 IECC)
  - Indoor water fixture use 20% more efficient than building baseline to meet EPA Act 1992
  - Cool Roofs for slopes 2:12 or less
  - Outdoor Lighting restriction
- Require building owners to agree to utility companies releasing annual consumption data to City

# New Commercial- Cont.

- **For buildings 50,000 sf and larger:**
  - **85%** LEED certified level compliance under any of the applicable LEED rating systems or equivalent (ex. must achieve at least 22 LEED NC v2.2 points)
  - Points required must include:
    - **1** point under the water efficiency credit titled “Water Use Reduction (**20%** Reduction)”
    - A minimum of **2** points (**14%** better than ASHRAE 90.1-2004) under the energy and atmosphere credit titled “Optimize Energy Performance”
  - Requires building owners to agree to utility companies releasing annual consumption data to City

# Phase 2 Requirements

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Proposed for adoption **April 9, 2008**

Effective Date: **October 1, 2011**

Divided into:

- All New Residential Construction
- All New Commercial Construction

# Phase 2 New Construction

## Mandatory Measures Effective Oct. 1, 2009

- **All New Residential Construction**

- All proposed projects must be LEED-certifiable under the LEED for homes standard, Green Built North Texas-certifiable, or meet an equivalent minimum green building standard certified level although formal certification by the USGBC, Green Built North Texas or an equivalent entity is not required
- **Points required for LEED certifiable must include:**
  - **1** point under the water efficiency credit titled “Indoor Water Use”
  - A minimum of **4** points (performance of ENERGY STAR for homes with a HERS rating of **83** or less) under the energy and atmosphere credit titled “Optimize Energy Performance”

# Phase 2 New Construction

- For **Green Built Certifiable** requirements must include:
  - **17.5%** better than the 2006 International Energy Conservation Code (IECC) as shown by:
    - IC3 – Energy Systems Lab, Inc. certificate
    - HERS index of **83**, or
    - Alternatively, to prove that the **17.5%** requirement has been met, builders can use the following standards for compliance:
      - ENERGY STAR
      - Green Built North Texas
      - LEED H ,or
      - Approved equivalent standard

# Phase 2 New Construction

- Meet at least **four** of the following water reduction requirements:
  1. The average flow rate for all lavatory faucets must be **2.0** gallons per minute
  2. The average flow rate for all showerheads must be **2.0** gallons per minute
  3. The average flow rate for all toilets must:
    - 3.1. be **1.3** gallons per flush;
    - 3.2. be dual-flush and meet the requirements of ASME A112.19.14; or
    - 3.3. meet the United States Environmental Protection Agency WaterSense specification and be certified and labeled accordingly
  4. ENERGY STAR labeled dishwasher that uses **6.0** gallons or less per cycle
  5. ENERGY STAR labeled clothes washers with modified energy factor (MEF)  $\geq$  **2.0** and water factor (WF)  $<$  **5.5**
  6. Utilize drip irrigation emitters for all bedding areas of the landscape plan

# Phase 2 New Construction

- **All New Commercial Construction**

- All proposed projects must be LEED-certifiable, Green Built North Texas-certifiable or certifiable under an equivalent green building standard at the minimum certification level, although formal certification by the USGBC, Green Built North Texas or an equivalent entity is not required
- **Points required for LEED certifiable must include:**
  - 1 point under the water efficiency credit titled “Water Use Reduction (20% Reduction)”
  - A minimum of 3 points (17.5% better than ASHRAE 90.1-2004) under the energy and atmosphere credit titled “Optimize Energy Performance”
- Multifamily developments have the option of using LEED NC, LEED for homes, Green Built North Texas or an equivalent green building standard