

# Construction Code Communicator



State of New Jersey  
 Chris Christie, Governor  
 Kim Guadagno, Lt. Governor

Department of Community Affairs  
 Lori Grifa, Acting Commissioner

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## Status of Adoption of 2009 National Model Codes

The adoption of the 2009 editions of the following national model codes, as amended, has been delayed as a result of Governor Christie's Executive Order 1, which was signed on January 19, 2010.

- International Building Code/2009 as the Building Subcode (N.J.A.C. 5:23-3.14) and Fire Protection Subcode (N.J.A.C. 5:23-3.17);
- National Standard Plumbing Code/2009 as the Plumbing Subcode (N.J.A.C. 5:23-3.15);
- International Energy Conservation Code/2009 as the Energy Subcode (N.J.A.C. 5:23-3.18);
- International Mechanical Code/2009 as the Mechanical Subcode (N.J.A.C. 5:23-3.20);
- International Residential Code/2009 as the One- and Two-Family Dwelling Subcode (N.J.A.C. 5:23-3.21); and
- International Fuel Gas Code/2009 as the Fuel Gas Subcode (N.J.A.C. 5:23-3.22).

All rules subject to Executive Order 1 are undergoing a review. Information on the pending publication of the 2009 national model codes as an adoption will be

See 2009 Model Codes - page 2

## PERMIT EXTENSION ACT of 2008 – Extended

On January 18, 2010, former Governor Jon S. Corzine signed a bill into law to extend the expiration date of certain permits under the "Permit Extension Act of 2008," P.L. 2008, c.78, by an additional two and a half years. Under this new law, P.L. 2009, c. 336, only the dates have changed. All of the other terms and conditions of the Permit Extension Act remain as they were. Below please find updated guidance on the application of the Permit Extension Act, which has been revised to reflect the new expiration dates.

As code officials, you will continue to deal with this law on two levels: its impact on permits issued under the UCC and its impact on prior approvals. The Act stops the clock on the running of approvals during the "extension period," which is now defined as January 1, 2007 through December 31, 2012. This means that any UCC permit that was valid as of January 1, 2007 will still be valid on December 31, 2012. On December 31, 2012, when the clock starts again, the permit is valid for an additional six months or for the time that would have remained on January 1, 2007, **whichever is shorter**. Any permit issued **during** the extension

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2009 Model Codes

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posted on the Division's web site as it is known.

While this review is taking place, all information in this Construction Code Communicator regarding requirements of the 2009 national model codes is informative only. Although a permit applicant could ask to be allowed to use the 2009 model codes, as proposed, the use of the 2009 model codes cannot be required by code officials until, and unless, the adoption is published in the New Jersey Register.

If you have any questions about the status of the adoption of the 2009 editions of these national model codes, please contact the Code Assistance Unit at (609) 984-7609.

Source: Emily W. Templeton  
Division of Codes

Permit Extension

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period (between January 1, 2007 and December 31, 2012) will be valid until June 30, 2013 (six months beyond the end of the extension period,) or until the date when it would have expired if the Permit Extension Act had not been passed, **whichever is longer**. However, the Act does have exclusions.

Please visit [www.nj.gov/dca/codes](http://www.nj.gov/dca/codes) for the information sent to construction officials in January 2010. The information contains examples of the Act's application to UCC permits, lists the types of permits/projects that are included and excluded, and further clarifies the definition of "Environmentally Sensitive Area."

If you have questions regarding this matter, please contact me at (609) 984-7609.

Source: Rob Austin  
Code Assistance Unit

## New Referenced Standard for Residential Construction in High Wind Regions

There is a new referenced standard in the 2009 International Building Code (IBC/2009) and 2009 International Residential Code (IRC/2009) for residential construction in high wind regions. This standard, International Code Council (ICC) 600, is referenced in exception #1 of Section 1609.1.1 of IBC/2009 and in Item #2 of Section R301.2.1.1 of IRC/2009. NOTE: This will apply once the 2009 model codes have been adopted.

See New Reference Standard –High Wind at right

New Referenced Standard –High Wind

Continued from left

What is the scope of this standard?

The scope of this standard is one- and two-family dwellings that are subject to the IRC/2009 and Group R-2 and R-3 buildings built under the IBC/2009. The provisions contained in the standard are based on enclosed buildings. An enclosed building is defined as having all exterior walls with solid elements for the full perimeter of the building. However, an open porch not exceeding 20 feet in width is allowed to be constructed in accordance with this standard.

Table 102 of the ICC 600 provides the limitations of building geometry including the number of stories for specific construction materials.

What does this standard have to offer?

The standard provides **prescriptive** methods for wind resistant design and construction details for residential buildings of concrete, masonry, wood-framed, and cold-formed steel-framed construction that are sited in high-wind areas consistent with the IBC/2009 and ASCE 7.

The standard is arranged as follows:

- Chapter 1 General requirements – provides the limitations of the standard, design parameters and criteria.
- Chapter 2 Buildings with concrete or masonry exterior walls – prescribes construction requirements for buildings where all of the exterior walls above the foundation are concrete or masonry.
- \*Chapter 3 Buildings with wood or steel light-framed exterior walls – prescribes construction requirements for building in which all exterior walls above the foundation are of light-framed construction using wood or steel framing members.
- \*Chapter 4 Combined exterior wall construction – prescribes construction requirements for various individual building elements where one or more exterior walls above the foundation contain a combination of building materials.
- Chapter 5 Roof assemblies – provides the criteria for design, materials, construction and quality control of roof assemblies.
- Chapter 6 Fenestration – prescribes performance and construction requirements for windows, skylights, garage doors, sliding glass doors, glass patio doors and entry doors. Waterproofing, sealing and flashing are not included.

See New Referenced Standard –High Wind - page 4

Index to the *Construction Code Communicator* 2009 (Volume 21)

Article	Edition	Issue No.	Page	Discipline
2006 IECC, 2% Better Than Code and RES-Check	Fall	2	4	Mechanical;Energy
2009 Building Safety Conference	Spring/Summer	1	1	
Accessible Parking at Health Care Centers and Offices Where People with Mobility Impairments Receive Health Care Services	Fall	2	5	Barrier Free; Building
Air Leakage	Spring/Summer	1	5	Building; Energy
ALERT! Changes Are Coming to the CCC	Spring/Summer	1	6	
Attention Electrical Subcode Officials—New FPN Bulletin on Web	Fall	2	1	Electrical
Certification to Perform Services on Unregulated Underground Heating Oil Tank Systems	Spring/Summer	1	7	Plumbing
Certification to Perform Services on Unregulated Underground Heating Oil Tank Systems	Fall	2	6	Plumbing
Children's Plumbing Fixture Requirements in Code	Fall	2	12	Plumbing
Clarification Regarding the Recent Amendment to the State Uniform Construction Code Act Concerning Technical Assistants	Fall	2	3	
COAH and You	Fall	2	8	
CPVC Fire Sprinkler System Drop Installations	Spring/Summer	1	1	Fire Protection
The Foundation of Good Partnerships	Spring/Summer	1	6	
Garden-type Utility Sheds and Similar Structures--Clarification	Spring/Summer	1	7	Building
Green Buildings: An Introduction	Spring/Summer	1	11	
Index to <i>Construction Code Communicator</i> 2008 (Volume 20)	Spring/Summer	1	3	
Kidde Recalls Dual Sensor Smoke Alarms- Can Fail to Warn of Fire	Fall	2	13	Fire Protection
Limited Use Limited Application Elevators and the Barrier Free Subcode	Fall	2	8	Barrier Free; Elevator; Building
Lowest Floor Level in Flood-Resistant Construction	Spring/Summer	1	10	Building
<i>New Jersey Register</i> Adoptions	Spring/Summer	1	10	
<i>New Jersey Register</i> Adoptions	Fall	2	10	
The New Jersey State Permit Surcharge (Training) Fee: Charge or No Charge?	Spring/Summer	1	4	
Owners Doing Work in Their Own Homes	Spring/Summer	1	8	
Rehab and the 2008 NEC	Fall	2	2	Electrical
Rehab and the 2008 NEC: Corrected Version	<i>Posted on Division's Web Site 2/2010</i>			Electrical
Residential and Commercial Building Duct Insulation—There is a Difference!	Fall	2	14	Plumbing
Residential Swimming Pools and the Plumbing Subcode: Update	Fall	2	9	Plumbing
Shared Services	Spring/Summer	1	8	
Site Remediation Reform Act: A Prior Approval Alert	Fall	2	7	
Solar Photovoltaic Systems—How to Calculate the Fee for the Permit Application	Fall	2	4	Building; Electrical
Special Inspections	Fall	2	1	Building
Update on National Standard Plumbing Code Hearings	Spring/Summer	1	11	Plumbing
We've Got the Power	Spring/Summer	1	9	Electrical
Which IFC Do I Use?	Spring/Summer	1	5	Fire Protection

**New Referenced Standard –High Wind** *Continued from page 2*

- Chapter 7 Exterior wall covering – provides the criteria for the design, materials, construction and quality of exterior wall covering.
- Chapter 8 Referenced standards – provides a list of standards that are referenced in this standard.
- Appendix A Design load assumptions – provides an overview of design assumptions for prescriptive continuous foundations for use with wood and steel light-framed buildings.
- Appendix B Flood-resistant foundations for residential buildings with wood for light-steel framed walls – provides the criteria to construct a building in flood plains.
- Appendix C ICC-600 design checklist – provides general guidelines to accomplish compliance with this standard.
- Appendix D Dimensions of nails described by penny-weight system – provides dimensions for penny-weight nails.

\*Chapters 3 and 4 of this standard do not address the prescriptive design of wood or steel light-framed constructed exterior walls above the foundation. The standard provides a reference for all exterior walls above the foundation to the American National Standards Institute/American Forest and Paper Association (ANSI/AF&PA), Wood Frame Construction Manual, for wood-framed buildings and the American National Standards Institute/American Iron and Steel Institute S230 (ANSI/AISI/S230), Standard for Cold-Formed Steel Framing-Prescriptive Method for One- and Two-Family Dwellings for steel light-framed construction.

The design checklist in Appendix C provides a tool to ensure compliance with all of the items that are part of this standard. The checklist facilitates the plan review for code officials to ensure that all items have been addressed.

If you have any questions on this, please direct your calls to me at (609) 984-7609.

Source: Marcel Iglesias  
Code Assistance Unit

## New Recreational Park Trailer Standard is Released

At N.J.A.C. 5:23 - 4D, the Uniform Construction Code (UCC) adopts American National Standards Institute (ANSI) A119.5 (Recreational Park Trailer Standard) as

*See Recreational Park Trailer Standards at right*

## Duct Insulation R-values: IECC/2006 vs. IECC/2009

In the International Energy Conservation Code (IECC)/2006, ducts or portions thereof that are located outside the building thermal envelope (BTE) are required to be insulated as per Section 403.2.1 of the 2006 International Energy Conservation Code (IECC), which requires that *supply and return ducts* be insulated to a minimum of R-8 and ducts in floor trusses be insulated to a minimum of R-6.

With the 2009 IECC on the horizon for adoption, I thought I would bring to your attention that Section 403.2.1 has been rewritten. Once the IECC/2009 is adopted, *supply ducts outside the BTE in attics* will be required to be insulated to a minimum of R-8 and *all other ducts outside the BTE* will be required to be insulated to a minimum of R-6.

As you can see, this is a significant difference between the 2006 and the 2009 editions of the IECC and it will be very important for mechanical plans to be labeled specifically for supply and return ducts.

Following the adoption of the 2009 IECC, if there are no supply ducts in the attic, all ducts outside the BTE will be required to be insulated with at least R-6 insulation.

If you have any questions of this matter, please contact me at (609) 984-7609.

Source: Rob Austin  
Code Assistance Unit

**Recreational Park Trailer Standards** *Continued from left*

the basis for its construction requirements for recreational park trailers. The 2005 edition is adopted by reference in the UCC. A 2009 version was recently published. The Department anticipates that the industry will begin to produce units to the newer version of the standard sometime later this year. We also anticipate that this will occur before we can change the version of the standard that is referenced in the UCC.

We have reviewed the newer version of the standard and determined that it is at least as stringent as the previous version and, in some cases, it is more stringent. Therefore, units that are constructed to the 2009 version are in compliance with the 2005 version and should be accepted as meeting the requirements of the UCC.

If you have any questions, please call me at (609) 984-7974.

Source: Michael Baier  
Acting Chief, Bureau of Code Services

## CONSTRUCTION REPORTER: DECEMBER 2009 CONSTRUCTION HIGHLIGHTS AND YEAR-TO-DATE SUMMARY

*Following is a reprint of the December 2009 Highlights of the New Jersey Construction Reporter, a publication of the NJ Dept. of Community Affairs that examines construction statistics derived from building permits and certificates issued throughout the State. The full New Jersey Construction Reporter may be viewed online at [www.nj.gov/dca/codes/cr/conrep.shtml](http://www.nj.gov/dca/codes/cr/conrep.shtml).*

- 2009 looks to be one of the worst years for New Jersey’s construction industry in more than twenty years, and December building permit activity was typical of previous months this past year.
- The estimated cost of construction authorized by building permits in December was \$643.3 million; 553 municipalities reported.
- Residential construction totaled \$373.6 million. This was 58.1 percent of all activity. New home construction totaled \$193.2 million, or 30 percent of all work.
- Nonresidential construction amounted to \$269.7 million, accounting for 41.9 percent of all activity. A total of 356,606 square feet of new office space was authorized by permits in December. New retail space amounted to 230,721 square feet.
- Evesham Township, Burlington County led all municipalities with \$23.5 million of work in December. Most of this was for assisted living complexes with 91 apartments. Evesham also ranked third among municipalities with the most new houses in December. Delanco, also in Burlington County, had 100 authorized units. Lower Township, Cape May County had 93. In all three communities, age- and income-restricted apartment buildings accounted for most of the housing activity.

### Year to Date

Even though year-to-date figures are preliminary, as a few municipalities still must submit monthly building permit reports, several trends are evident for 2009:

- New Jersey’s construction industry, which declined in 2008, grew worse in 2009.
- All major indicators are down compared to 2008. The depressed housing market continues, both for single- and multi-family developments.
- Between January and December 2009, the estimated cost of construction authorized by permits was \$9.4 billion. This is \$4.4 billion less than this same time period for 2008, for a decline of 31.7 percent.

Major Construction Indicators, New Jersey December Year-to-Date Figures Compared to Annual Totals				
Period	Estimated Cost of Construction	Authorized Housing Units	Authorized Office Space (square feet)	Authorized Retail Space (square feet)
<b>Year-to-Date Figures (January to December)</b>				
<b>January – December 2009</b>	\$9,446,838,643	11,067	4,035,812	2,417,629
<b>January – December 2008</b>	\$13,834,284,685	16,203	7,869,822	5,459,374
<b>January – December 2007</b>	\$14,907,746,308	25,472	8,875,968	4,993,848
<b>Annual Figures</b>				
<b>2008</b>	\$13,944,534,578	16,338	7,962,998	5,557,101
<b>2007</b>	15,356,572,820	25,948	9,569,501	5,423,889
<b>2006</b>	15,675,107,955	32,050	11,113,555	5,186,662

Construction Reporter

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Major Construction Indicators, New Jersey December Year-to-Date Figures Compared to Annual Totals				
Period	Estimated Cost of Construction	Authorized Housing Units	Authorized Office Space (square feet)	Authorized Retail Space (square feet)
Annual Figures -continued				
2005	15,397,507,147	39,688	11,038,132	5,965,258
2004	14,274,331,850	39,254	12,219,068	4,911,257
2003	12,148,747,807	35,171	9,744,146	6,038,428
2002	12,079,942,099	34,589	9,261,054	7,560,913
2001	12,007,456,630	35,680	19,134,533	7,244,833
2000	11,387,683,514	38,065	15,531,039	6,063,412
1999	10,584,167,530	37,536	13,237,891	6,229,471
Difference between January–December 2008 & January-December 2009				
<b>2008 – 2009 (Jan – Dec)</b>	-\$4,387,446,042	-5,136	-3,834,010	-3,041,745
<b>Percent Change</b>	-31.7%	-31.7%	-48.7%	-55.7%
Source: N.J. Department of Community Affairs, 2/8/10				

- New home construction declined by over 5,100 units (31.7 percent). Only 11,067 new dwellings were authorized by permits between January and December 2009. Two years ago, the number exceeded 25,000.
- For the past ten years, one of the strongest housing markets in the State has been along the Hudson River waterfront in Jersey City. This trend continued in 2009. Jersey City accounted for one in ten new houses built in the State in 2009. Between January and December 2009, the City's construction office issued building permits for 1,129 dwellings.

Authorized Housing in Newark and Jersey City, 2001-2009 ytd					
Year	Newark		Jersey City		All New Jersey
	Authorized Units	Rank	Authorized Units	Rank	Authorized Units
2001	1,066	2	2,009	1	35,680
2002	1,223	1	907	2	34,589
2003	1,730	1	969	2	35,171
2004	1,702	2	2,156	1	39,254
2005	2,611	2	3,778	1	39,688
2006	2,125	2	2,578	1	31,709
2007	927	2	2,765	1	25,948
2008	289	6	1,468	1	16,338
2009 ytd	285	4	1,129	1	11,067
Source: N.J. Department of Community Affairs, 2/8/10					



- The City of Newark also had a strong demand for new houses in 2009, ranking fourth among all municipalities with 285 dwellings authorized by permit. As in Jersey City, Newark's strong housing market has occurred throughout most of the decade.

## 2008

- Last year, in 2008, big, commercial and public-works developments softened the effects of a depressed homebuilding industry. Atlantic City led all municipalities with \$594.2 million of work. Much of this was from the new casino, hotel, and parking complex for Revel Entertainment.
- Voorhees Township in Camden County had \$357.6 million of construction. A new hospital for Virtua Health network was reported with an estimated construction cost of \$300 million.
- Jersey City ranked third among localities in 2008 with \$349.2 million of work, and much of this was from a strong housing market.



*Revel Entertainment casino and hotel, Atlantic City*

## 2009

- Between January and December 2009, Jersey City had the most authorized construction among all municipalities. The estimated cost of all work reported on building permits was \$436.4 million. Nearly two-thirds of all permit activity was for new home construction.
- Franklin Township, Somerset County ranks second with \$278.8 million. Most of this was for one development, a new office complex for investment bank Morgan Stanley. The facility will have total floor area of more than 370,000 square feet.
- Newark ranked third with \$204.9 million. Rehab work on office, retail, and other existing commercial buildings accounted for almost all of the activity in the City.
- "State Buildings" refers to permits for projects reviewed at the Department of Community Affairs. They typically include large, public projects managed or constructed by State Government agencies or their instrumentalities. Since January, \$297.9 million was authorized for such projects in communities throughout the New Jersey. Many are big capital improvements at public facilities of higher education, including Stockton College, Montclair University, and Rutgers University. This figure also includes facility improvements for New Jersey Transit.

# GFCI Protection in New Jersey



The National Electrical Code (NEC)/2008 was adopted, as amended, on April 6, 2009 as the electrical subcode (N.J.A.C. 5:23-3.16) of the Uniform Construction Code (UCC).

In the adoption of the NEC/2008, at N.J.A.C. 5:23-3.16(b)3i, Section 210.8(A)(2) and (5) and their exceptions from the NEC/2005, which relate to GFCI protection, **were retained.**

In NEC/2005, Section 210.8(A)(2) requires GFCI protection in “garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use” with the following two exceptions:

- 1 - Receptacles that are not readily accessible.
- 2 - A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with 400.7(A)(6), (A)7, or (A)(8). Receptacles installed under the exceptions to 210.8(A)(2) shall not be considered as meeting the requirements of 210.52(G).

In NEC/2005, Section 210.8(A)(5) requires GFCI protection in “unfinished basements, defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like” with the following three exceptions:

- 1 - Receptacles that are not readily accessible.
- 2 - A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with 400.7(A)(6), (A)7, or (A)(8).
- 3 - A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

These NEC/2005 sections continue to be part of the electrical subcode of the UCC.

If you have any questions, you may contact me at (609) 984-7609.

Source: Rob Austin  
Code Specialist

# New NFPA Referenced Standards for the 2009 I-Codes



I have been receiving quite a few calls lately about which NFPA standards will be used once we adopt the 2009 editions of the International Code Council (ICC) model codes (I-codes). Below is a partial list from Chapter 35 of the International Building Code (IBC) and Chapter 43 of the International Residential Code (IRC) of the most commonly used referenced standards that must be used for installation *once we start using the 2009 ICC model codes*. A complete list of referenced standards can be found in Chapter 35 of the IBC and Chapter 43 of the IRC.

<u>Subject</u>	<u>Standard/Edition</u>
Portable Fire Extinguishers	10-07
Low Expansion Foam	11-05
Carbon Dioxide Extinguishing Systems	12-05
Sprinkler Systems	13-07
1&2 Family Dwellings and Manufactured Homes	13D-07
Residential Occupancies Up to and Including Four Stories in Height	13R-07
Standpipe and Hose System	14-07
Foam-water Sprinkler and Foam-water Spray	16-07
Dry Chemical Extinguishing Systems	17-02
Wet Chemical Extinguishing Systems	17A-02
Stationary Pumps for Fire Protection	20-07
Flammable and Combustible Liquids Code	30-08
Liquefied Petroleum Gas Code	58-08
Prevention of Fires and Dust Explosions in Agricultural and Food Product Facilities	61-08
National Fire Alarm Code	72-07
Fire Doors and Other Opening Protectives	80-07
Smoke Management Systems in Malls, Atria and Large Spaces	92B-05
Identification of the Hazards of Materials for Emergency Response	704-07
Clean Agent Fire Extinguishing Systems	2001-08

If you need information on the applicable edition of any other standards, please call me at (609) 984-7609.

Source: Michael Whalen  
Division of Codes and Standards



<b>Dollar Amount of Authorized Construction</b>					
<b>Top Performers, 2009 year to date</b>					
<b>Municipality</b>	<b>County</b>	<b>Estimated Cost of Construction (dollars)</b>	<b>Authorized Housing Units</b>	<b>Authorized Office Space (square feet)</b>	<b>Authorized Retail Space (square feet)</b>
Jersey City	Hudson	\$436,436,533	1,129	77,990	5,400
Franklin Township	Somerset	278,821,851	139	393,090	0
Newark City	Essex	204,934,234	285	117,079	26,588
Woodbury City	Gloucester	164,002,923	1	460	0
Paterson City	Passaic	150,213,279	86	206	7,938
Toms River	Ocean	105,306,547	98	41,807	5,764
Lakewood	Ocean	98,735,713	368	84,230	5,955
Edison Township	Middlesex	88,202,530	29	57,977	161,284
Woodbridge	Middlesex	88,128,550	22	29,535	78,851
Princeton Twp	Mercer	82,165,958	20	30,588	0
State Buildings		297,895,137	0	112,566	48,536
<b>New Jersey</b>		<b>\$9,446,838,643</b>	<b>11,067</b>	<b>4,035,812</b>	<b>2,417,629</b>

Source: N.J. Department of Community Affairs, 2/8/10

**New Home Prices**

- In the fourth quarter of 2009, a total of 2,045 new houses were completed, occupied, and began enrollment in a new home warranty program.
- Five counties accounted for over half of these new houses. Ocean County had 261 new homes. Monmouth had 199. Gloucester had 185. Hudson had 179, and Bergen County had 178 new homes that began enrollment in a warranty program in the fourth quarter of 2009.
- The median sales price of the new houses built in the State during this time was \$340,521. This was a decline of 8.1 percent compared to the previous quarter.
- Somerset, Hunterdon, and Cape May Counties had the highest priced homes.

<b>New House Prices</b>			
<b>Period</b>	<b>Number of New Houses</b>	<b>Median Sale Price</b>	<b>Percent Change in Sale Price</b>
1998	23,884	\$209,980	10.5%
1999	24,479	\$224,496	6.9%
2000	25,058	\$231,728	3.2%
2001	23,372	\$253,670	9.5%
2002	23,647	\$274,705	8.3%
2003	22,226	\$307,168	11.8%
2004	23,844	\$349,900	13.9%

New House Prices			
Period	Number of New Houses	Median Sale Price	Percent Change in Sale Price
2005	24,571	\$378,992	8.3%
2006	22,697	\$413,825	9.2%
2007	18,397	\$424,570	2.6%
2008	13,841	\$425,000	0.1%
4 <sup>th</sup> Quarter 2007	4,155	\$410,000	-0.4%
1 <sup>st</sup> Quarter 2008	3,637	\$432,900	5.6%
2 <sup>nd</sup> Quarter 2008	4,240	\$475,000	9.7%
3 <sup>rd</sup> Quarter 2008	3,204	\$405,000	-14.7%
4 <sup>th</sup> Quarter 2008	2,760	\$380,000	-6.2%
1 <sup>st</sup> qtr 09 prelim	1,564	\$360,000	-5.3%
2 <sup>nd</sup> qtr 09 prelim	2,041	\$375,000	4.2%
3 <sup>rd</sup> qtr 09 prelim	1,726	\$370,400	-1.2%
4 <sup>th</sup> qtr 09 prelim	2,045	\$340,521	-8.1%
Source: N.J. Department of Community Affairs, 2/8/10			

Source: John Lago  
Division of Codes and Standards

## Permits and Prior Approvals

On May 18, 2009, the construction permit application and plan review procedures in the Uniform Construction Code (UCC) were revised with regard to prior approvals.

At N.J.A.C. 5:23-2.15(f)4ii, the UCC states that where a Department plan review is not required, an applicant for a construction permit is to file an application with the local enforcing agency. The UCC requires that all prior approvals be met before a construction permit may be obtained. However, the revised subsection (1) makes it clear that if a required State, county or local prior approval has not been granted, *plan review is to proceed* provided that the application for a permit is otherwise complete and the plan review fee has been paid. In addition, at subsection (A), an exception is included for permit applicants for plan review of individual, owner-occupied one- or two family home addition or alteration projects when zoning approval is not in place.

See Prior Approvals - page 11

## Solar Photovoltaic Installations: The Board of Examiners of Electrical Contractors Explains

It seems there is considerable confusion about whether an electrical contractor's license is required for solar-photovoltaic (SPV) installations. Substantially, the question is: are SPV installations, including the SPV panels themselves, electrical work within the meaning of the regulations, so as to require an applicant for a construction permit to obtain an electrical contractor's license to perform such work? The short answer is yes; except that owners of single-family homes doing work on their own dwellings are exempt.

N.J.S.A. 45:5A-1 et seq., known as "The Electrical Contractors Licensing Act of 1962" (the Act), establishes generally that no person shall advertise, enter into, engage in, or work in a business as an

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**SPV Installations**

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electrical contractor unless they have secured a business permit and a license from the New Jersey Board of Electrical Contractors (the Board).

The term "electrical contractor" is defined as a person who engages in the business of contracting to install, erect, repair, or alter electrical equipment for the generation, transmission, or utilization of electrical energy (N.J.S.A. 45:5A-2(d)). Accordingly, any person who engages in these activities is an electrical contractor by definition and is required to obtain a business permit and license from the Board.

SPV systems are, by definition, electrical work. They are a series of components that generate (the SPV panels), transmit, and/or utilize electrical energy. Any person engaged in installing, erecting, repairing, etc. such equipment must be an electrical contractor under the provisions of the Act.

The Act further sets forth a limited listing of exempt electrical work or construction that is not included in the business of electrical contracting so as to require a license and business permit under the Act (N.J.S.A. 45:5A-18). Neither SPV systems nor SPV panels are listed therein and thus are not exempt, *per se*.

Recently the Board considered this issue and concluded that SPV systems, including the SPV panels themselves, to the extent that they are used for the generation, transmission, or utilization of electrical energy, constitute electrical work within the meaning of the Act. Therefore, unless work was exempted by statute (e.g. operates at less than 10 volts, etc.), a contractor is required to obtain a license and business permit issued by the Board to install, erect, and repair, etc., SPV systems including SPV panels themselves.

Consequently, pursuant to the UCC, code officials should require permit applications for SPV systems, including SPV panels themselves, to be signed and sealed by electrical contractors holding a valid business permit issued by the Board.

Questions as to whether a licensed electrical contractor is required may be directed to either Marian or Kathleen of the Board of Examiners of Electrical Contractors at (973) 504-6410.

Source: Joseph P. Schooley, Chairman.  
Board of Examiners of Electrical Contractors



**Prior Approvals**

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The UCC continues to require that *no permit may be issued* until all required State, county and local approvals are in place.

In sum,

- For an owner-occupied one- or two-family dwelling, zoning approval must have been obtained before plan review may proceed.
- For all other projects, plan review proceeds before all prior approvals have been obtained as long as the permit application is otherwise complete and the plan review fee has been paid.
- For all projects, prior approvals must be in place before a permit may be issued.

If you have any questions on this matter, please contact me at (609) 984-7609.

Source: Rob Austin  
Code Assistance Unit

## Solar Panels and Guards

As more and more solar panels are being installed, the Department has received many phone calls asking whether guards are required for servicing the panels. The short answer is no, guards are not required.

Section 304.10 of the International Mechanical Code (IMC)/2006 states that guards shall be provided where appliances, equipment, fans or other components *that require service* are located within 10 feet of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches above the floor, roof or grade below.

Typically solar panels installed on a roof require cleaning, but not servicing. Therefore, this section of the IMC/2006 does not require solar panels to have guards.

Finally, please note that the language in the IMC/2009 is identical to that of the IMC/2006 and will be applied the same way once the 2009 national model codes have been adopted.

If you have any questions, please contact the Code Assistance Unit at (609) 984-7609.

Source: Suzanne Borek  
Code Assistance Unit

## Replacement and Newly Installed Electrical Panels

"Newly installed" versus "replacement." "Never there" versus "upgrade." What am I getting at, you ask? Well, it's an electrical panel being installed in an existing home. What rules from the National Electrical Code/2008 (NEC/2008) apply?

New Jersey's Rehabilitation Subcode (N.J.A.C. 6:23-6) makes it clear that there are two sections to be consulted: Section 6.8, Materials and Methods, and Section 6.9, New Building Elements.

Replacement or Upgrade: N.J.A.C. 5:23-6.8(d) specifies the sections of the NEC/2008 that are to be met when a building owner upgrades or replaces an electrical panel. For example, when the panel stays in its existing location, but is upgraded from 100 amps to 200 amps, N.J.A.C. 5:23-6.8(d) provides that NEC/2008, Sections 110.26, 110.32, 110.33, 404.8 and 408.18 are *not* required to be followed for projects of 600 Volts, nominal, or less (Section 110.32 applies when the upgrade is over 600 Volts, nominal). To further bring this point home, N.J.A.C. 5:23-6.8(d)10 states, "Existing working clearances, clear space, access and entrance dimensions to working spaces, illumination, headroom clearances, and location of overcurrent protection devices shall be allowed to remain without modification."

Newly Installed: When the electrical panel is to be installed in a new location, N.J.A.C. 5:23-6.9(a)19 states, "Newly installed (not replacing an existing device) electrical service equipment, switchboards, panelboards, motor control centers and other electrical equipment containing overcurrent, switching or control devices likely to require examination, adjustment, servicing or maintenance while energized shall conform with the requirements specified in N.J.A.C. 5:23-6.8, Materials and methods, and, in addition, shall conform with Sections 110.26 (Space About Electrical Equipment--600 Volts, Nominal or Less), 110.32 (Work Space About Equipment--Over 600 Volts, Nominal), 110.33 (Entrance and Access to Work Space), 404.8 (Accessibility and Grouping) and 408.18 (Clearances), as applicable, of the electrical subcode.

Thus, for a totally new installation of an electrical panel, at N.J.A.C. 5:23-6.9(a), New building elements, the NEC/2008 sections that were deleted by N.J.A.C. 5:23-6.8(d), Materials and methods, for replacement

### Electrical Panels

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or upgrade are brought back in and are applied to the installation of a panel in a location where there never was one.

If you have any questions, you may contact me at (609) 984-7609.

Source: Rob Austin  
Code Specialist

## US EPA Lead-Based Paint Renovation, Repair and Painting (RRP) Rules

### What are the RRP Rules?

The US Environmental Protection Agency (EPA) has adopted rules for contractors performing work that disturbs lead-based paint. The rules, known as the RRP rules, apply to renovation, repair, painting or any other activity that disturbs painted surfaces. These rules require that contractors performing work in housing built before 1978 or in child-occupied facilities (schools or day care centers) be certified by the EPA. All employees performing this work must be trained in lead-safe work practices through completion of an EPA-accredited course. And the contractors must distribute a lead pamphlet before starting work. The rules exempt work that will disturb six square feet or less of paint per room in the building's interior or 20 square feet of painted surface or less on the exterior. Work in buildings that have been tested and found to be free of lead-based paint is also exempt.

We have begun to get questions now because the requirement for contractors to be certified becomes effective on April 22, 2010, two years after the date of adoption of the rules.

### Who is responsible for enforcement of these rules?

States may apply to the US EPA for authorization to administer this program. The EPA is the enforcement agency in states that do not apply for authorization. New Jersey has *not* applied. This means that the EPA is the enforcement agency for the RRP rules in New Jersey.

**Is the EPA certification to be treated as a prior approval for obtaining a permit under the UCC? No. Does the code official have any enforcement responsibility with regard to these EPA rules? No.**

# UPDATE 2 - Certification to Perform Services on Unregulated Underground Heating Oil Tank Systems

This article is updating the article that appeared in the *Construction Code Communicator*, Fall 2009. As stated in that article, any contractor who provides services on any unregulated underground heating oil tank systems and applies for a permit from a municipality to perform this work is going to be required to provide proof of certification from the New Jersey Department of Environmental Protection (NJDEP).

On January 15, 2010, NJDEP began to enforce the provisions of N.J.A.C.7:14B-16, that require all individuals and firms performing work on unregulated underground tanks to hold a certification. At the time a permit is applied for from the local municipality, a proof of certification is required for all work performed on unregulated underground heating oil tanks as defined in N.J.A.C. 7:14B-1.6.

*See Unregulated USTs at right*

## **Lead-Based Paint**

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As stated above, enforcement rests with the EPA. This information has been provided to you so that you are aware of the new EPA requirements and are able to respond to questions from homeowners or contractors. If anyone has further questions or would like additional information, you may direct them to the EPA website at <http://www.epa.gov/lead/pubs/renovation.htm>. There is also a link on the Division's webpage.

Source: Amy Fenwick Frank  
Division of Codes and Standards

## **Unregulated USTs**

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The following are two frequently asked questions:

1. Do the certification requirements pertain to aboveground heating oil tanks?

No, the regulations only pertain to underground heating oil tanks.

2. Can a homeowner do the work themselves without the proper certification?

No, all companies and individuals performing work on unregulated heating oil tanks (underground) must be certified in the proper category. Therefore, a homeowner can perform work **only on aboveground** heating oil tanks.

Further information concerning the Unregulated Heating Oil Tank program can be found at <http://www.nj.gov/dep/srp/srp/unregulatedtanks/>.

Should you have any questions on this matter, you may contact Gary Sanderson, Program Coordinator at the Department of Environmental Protection at (609) 633-0544 or me at (609) 984-7609.

Source: Thomas C. Pitcherello  
Code Assistance Unit



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Please direct any comments or suggestions to the NJDCA, Division of Codes and Standards, Attention: Code Development Unit, PO Box 802, Trenton, NJ 08625-0802.

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