

# **BUILDING CODE UPDATE (IRC & IBC)**

**April 20, 2023**

*Codes effective March 6, 2023*



## **Moderator:**

Donald Dyrness, Main Street Custom Homes & Remodeling  
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## **Panelists:**

Charlie Baldanza, Baldanza Design  
charlie@baldanzadesign.com (201) 391-0020

Ken Fox, Fox Architectural Design  
kfox@foxarch.com (973) 970-9355 x 16

Larry Appel, Appel Design Group, Architects  
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**Metropolitan Builders & Contractors Association of NJ**

39 East Hanover Ave. Suite B4 - Morris Plains, NJ 074950  
(973) 887-2888      [www.Metrobca.org](http://www.Metrobca.org)

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## **General Information**

- Section 310.6, Residential Group R-5 “Residential Group R-5 occupancies shall include all detached one- and two-family dwellings not more than three stories in height with a separate means of egress and multiple single-family townhouses not more than three stories in height with a separate means of egress designed and constructed in accordance with the International Residential Code. (Some care facilities with limited occupants also apply).
- All other Residential Occupancies are under the IBC
- 5:23-6 Rehabilitation Subcode was adopted on March 6, 2023 to reflect the 2021 I-Codes, 2017 ICC A117.1 and the 2020 National Electrical Code.
- Barrier Free ICC A117.1-2017 has changes including minimum dimensions for ADA
- Energy codes have extensive changes- Blower Door test now mandatory along with visual inspection. Per Bulletin 22-1 blower door testing is not required for additions.
- Section 5:23-6.5(e)11, 6.6(e)18 and 6.7(e)15 -when the work being performed creates or exposes the roof decking/sheathing or the framing of any wall, floor or ceiling, or roof assembly that is part of the building thermal envelope, any accessible voids in insulation shall be filled using the insulation R-values of the new energy tables R402.1.2 or Table R402.2.6 for residential and Table 5.5-4 or 5.5-5 for commercial.

## **2021 NJ International Residential Code (Significant Changes)- IRC**

- Table 301.2 mercer county has moved to climate zone 4A.
- Wind speed/windborne debris region.
- Townhouse unit definition
- R310.1/ r310.2 emergency escape and rescue opening/ routes clarified- definition
- R311.7 stairways/ R311.7.7 stairway walking surface
- R312.2 window fall protection. –“Sill”
- R314.3 location. –Smoke alarms addressing high ceilings adjacent to hallways serving bedrooms.
- R506.2.3 vapor retarder. – A thicker vapor retarder of 10-mil is now required opposed to 6-mil.
- R507.3- R507.10 Deck- many minor tweaks to be familiar with.
- R609.4.1 Garage door labeling.
- Appendix AW 3D Printed buildings/ R301.1.4 Intermodal shipping containers

## **2021 NJ International Building Code Significant Changes - IBC**

- Definitions: Mass Timber: three new construction types of IV-A, IV-B and IV-C. Inc. height limitations & requirements, Puzzle Rooms, Section 3115 Intermodal shipping containers, requirements for mechanical access garages, 503.1.4 Occupied roofs/506.3.2 Minimum Frontage distance/508.4.4 Separation. Among other sections, these have been modified for clarity and to avoid mis-interpretation.
- Chapter 5 General Building Areas & Heights- Table 507.2.3 stainless steel fasteners within 300 feet of saltwater shoreline.
- Chapter 7 Fire & Smoke Protection- Miscellaneous clarifications to definitions
- Chapter 9 Fire Protection Systems-IBC 903.2.10 Group S-2 Parking Garages; 903.3.1.2.3 – Height Measurement; 903.3.1.2.2 -Corridors and Balconies in the Means of Egress; IBC 907.5.2.1.3 - Audible signal frequency in Group R-1 and R-2 sleeping rooms. 907.5.2.1.3.2 Smoke alarm signal in sleeping rooms
- Chapter 10 Means of Egress- many minor changes in addition to minimum illumination level for both exit and exit access stairways has been increased from 1 foot-candle to 10 foot-candles.
- Chapter 11- Accessibility- 1107.2 Electrical vehicle charging stations/1110.6 Bottle-filling stations.
- Chapter 14 Exterior Walls- 1404.3.1 Class I and II vapor retarders./ 1404.3.2 Class III vapor retarders.

- Chapter 16 Structural Design 1606.2 Weights of materials of construction/1607.11.4 Fall arrest, lifeline, and rope decent system anchorages/1608.2 Ground snow loads/1610.2 Uplifts loads on floors and foundations/1611.1 Design rain loads
- Chapter 17 Special Inspections-Table 1705.3 Required special inspections and tests of concrete construction./1705.10 Structural integrity of deep foundation elements/1705.18 Fire-resistant penetrations and joints/1709.5 Exterior window and door assemblies.
- Chapter 33 Safeguards During Construction-3313 Water supply for fire protection./3314 Fire Watch During Combustible Construction

### **Important Websites or Phone Numbers**

#### **Department of Community Affairs**

<https://www.nj.gov/dca/divisions/codes/codreg/>

Division of Codes and Standards

(609) 292-7899



# Kenneth J. Fox

Principal Architect and  
President

## EDUCATION

- New Jersey Institute of Technology—New Jersey School of Architecture  
1976—1981  
Degree: Bachelor of Architecture, May 1981  
Area of Concentration: Landscape Concepts
- Morris Knolls High School

## MEMBERSHIPS

- NJ School of Architecture Dean's Council
- Board Member of Roxbury Township Chamber of Commerce
- Board Member of Metropolitan Builders and Contractors Association of NJ
- Board Member of the Housing Partnership of Morris County
- Member of County College of Morris, Design Department Advisory Committee
- Member of Morris Hills Regional District Career and Technical Education Advisory Committee (35 years)
- Adjunct Professor—County College of Morris (2000)
- Past President, Jefferson Township Rotary Club
- Member of Jefferson Township Chamber of Commerce
- Member of Sussex County Chamber of Commerce
- Member of Sussex County Economic Development Committee
- Member of Morris County Chamber of Commerce
- Council Member of Morris County **Leadership Morris** Alumni Association
- Member of Mount Olive Chamber of Commerce
- New Jersey Architectural License #09263

## LICENSING & REGISTRATION

- New York Architectural License #026366
- Pennsylvania Architectural License #RA-016320-B
- NCARB Certification
  - ◊ Certified Green Professional
  - ◊ Certified Graduate Associate
- New Jersey Real Estate License
- Certified Construction Dispute Resolution Specialist

## EXPERT WITNESS TESTIMONY

Superior Court, NJ, Morristown—The Honorable Paul Bangiola –DeYoung vs. DeYoung

Superior Court, NJ, Morristown –The Honorable Clamp-Chastney vs. DeVito Roofing

Arbitration, Wilkes Barre, PA-Expert Witness Value of Architectural Services

## *Professional Expert Witness as Architect and/or Planner*

### **NEW JERSEY**

#### **Bergen County**

Borough of North Arlington  
Borough of Upper Saddle River  
Borough of Westwood  
Township of Lyndhurst  
Township of Wyckoff

#### **Essex County**

Borough of Caldwell  
Borough of Essex Fells  
Borough of Roseland  
City of Newark  
City of Orange  
Town of West Caldwell  
Township of Bloomfield  
Township of Fairfield  
Township of Livingston  
Township of Montclair  
Township of Verona

#### **Mercer County**

Township of Ewing  
Township of Hamilton

#### **Hunterdon County**

Borough of Flemington  
Township of Hampton  
Township of Readington

#### **Hudson County**

City of Hoboken  
Jersey City

#### **Morris County**

Borough of Butler  
Borough of Chatham  
Borough of Chester  
Borough of Florham Park  
Borough of Kinnelon  
Borough of Lincoln Park  
Borough of Mendham  
Borough of Morris Plains  
Borough of Mount Arlington  
Township of Mt. Olive  
Borough of Mountain Lakes  
Borough of Netcong  
Borough of Riverdale  
Borough of Rockaway  
Borough of Victory Gardens  
Borough of Wharton  
Town of Boonton  
Town of Dover  
Town of Morristown  
Township of Boonton  
Township of Chatham  
Township of Chester  
Township of Denville  
Township of East Hanover  
Township of Hanover  
Township of Harding

Township of Jefferson  
Township of Long Hill  
Township of Mendham  
Township of Mine Hill  
Township of Montville  
Township of Morris  
Township of Parsippany-Troy Hills

Township of Pequannock  
Township of Randolph  
Township of Rockaway  
Township of Roxbury  
Township of Washington

#### **Monmouth County**

Borough of Highlands  
Borough of Sea Girt  
Borough of Shrewsbury  
City of Asbury Park  
Township of Colts Neck  
Township of Middletown

#### **Ocean County**

Township of Brick  
Township of Stafford

#### **Passaic County**

Borough of North Haledon  
Borough of Totowa  
Township of West Milford

#### **Somerset County**

Borough of Bernardsville  
Borough of North Plainfield  
Borough of Peapack Gladstone

Township of Bernards  
Township of Branchburg  
Township of Raritan  
Township of Warren

#### **Sussex County**

Borough of Andover  
Borough of Branchville  
Borough of Hopatcong  
Borough of Stanhope  
Borough of Sussex  
Town of Newton

Township of Andover  
Township of Byram  
Township of Frankford  
Township of Franklin  
Township of Green  
Township of Sparta  
Township of Wantage

#### **Union County**

Town of Summit  
Town of Westfield

#### **Warren County**

Town of Hackettstown  
Township of Belvidere  
Township of Mansfield  
Township of Washington

#### **NEW YORK**

Town of Jewett



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F 973.577.4455

## Laurance D. Appel, A.I.A. , *Principal in Charge*

### **EDUCATION:**

- |  |   |
|--|---|
| <input type="checkbox"/> <i>Master of Architecture, 1989</i><br>School of Architecture<br>Tulane University, Louisiana | <input type="checkbox"/> <i>Bachelor of Science in Civil Engineering, 1986</i><br><i>(Structures / Construction Management)</i><br>College of Engineering, Rutgers University, NJ |
|--|---|

### **CERTIFICATION & MEMBERSHIPS:**

- ☐ Registered Architect, States of New Jersey, New York, & Pennsylvania
- ☐ National Council of Architectural Registration Boards (NCARB); Certified
- ☐ American Institute of Architects (A.I.A.); Member
- ☐ National Association of Home Builders (NAHB); Member, Metropolitan Builders and Remodelers Association
- ☐ Certification: NAHB CGP (Certified Green Professional).
- ☐ International Code Council; Professional Member
- ☐ Vice Chair, Randolph Township Environmental & Landmarks Committee
- ☐ Board Member, Jewish Family Services of Central New Jersey

### **CAREER PROFILE:**

Larry Appel is Principal in charge of Appel Design Group Architects, a 13 person, award winning Architectural firm located in Florham Park, NJ. He holds degrees in both Architecture and Engineering and maintains active membership in the NAHB (National Association of Home Builders), AIA (American Institute of Architects), and the ICC (International Code Council).

**APPEL DESIGN GROUP (ADG)** focuses on a collaborative architectural design process with creative problem solving for a wide range of commercial, institutional, and residential projects. The success of the firm is directly attributable to an emphasis on professional service and expertise in creative problem solving. The principals and staff encourage an interactive design process with the client ensuring a design solution clearly addressing a project's requirements. ADG is recognized for implementing projects which are both creatively and effectively designed and logically constructed. This strength is continually proven by the large number of clients who return to us with repeat commissions.

**APPEL DESIGN GROUP** has long term experience with a wide range of project types. The firm's focus has been with multi-family and mixed use development/redevelopment work. The firm also has a portfolio of successfully completed projects ranging from institutional and commercial, to housing developments, as well as custom single family new homes and renovations.

Larry Appel lives in Randolph with his wife, Judy. He has two sons, Evan, a cinematographer and Seth, a civil engineer. Larry has been actively involved in their community and has volunteered for various local organizations enjoying leadership positions. He enjoys spending time with his family and being outdoors ... golfing, biking, hiking, and skiing.

**APPEL DESIGN GROUP** is a full-service architectural firm. The firm has extensive experience with a wide variety of building types including Custom Residential Design, Multi-Family Residential & Redevelopment, Commercial, Corporate, and Institutional Projects. The firm has built its reputation over the past 60 years catering to a varied client base including some of the area's largest speculative builder/developers.

**Professional services include:**

- Comprehensive Architectural Design Services
- Space Planning
- Construction Documents
- Specifications
- Interior Architecture and Design
- Interior Tenant Fitouts
- Site Planning
- Zoning Analysis
- Master Planning and Feasibility Studies
- Barrier Free Accessibility Compliance
- Cost Estimating and Take-Offs
- Construction Cost Consultation
- Bid Evaluations
- Construction Administration
- Field Inspections and Reports
- Expert Testimony

Appel Design Group, P.A. has developed long term working relationships with qualified consultants to provide expanded engineering, site, traffic, environmental, expediting, and other disciplines which may be required for a project but would not be provided in-house. Consultants are selected for the project team based on the particular expertise required for a given project. Appel Design Group would be the primary interface with the client, and, as team leader, would be responsible for review and coordination of work of all project team members

## Donald J. Dyrness - President

109 Main Street

Succasunnna, NJ 07876

(973) 998-7300

[don@mainstreetcustomhomes.com](mailto:don@mainstreetcustomhomes.com)

Don is a life-long resident of Succasunna, NJ and became involved in the construction industry at an early age, helping his father out on jobsites. As a young adult, he continued to learn the trade from the ground up, and was involved in all facets of the building process. After earning his degree in chemical engineering, Don returned to his roots and has built a career in the home construction industry for over 25 years. In his spare time, Don enjoys outdoor activities, especially skiing and hiking.

Don is responsible for the business side of the company. He handles advertising, financing, contracts, permits/approvals and many other aspects of managing your project. He coordinates trade contractors, manages project schedules and facilitates communication between office staff and field team members. Don also supervises the estimating process and purchase of project materials.

He is an active member of the NAHB's Builder 20 Club, a nationwide group of custom home builders or remodelers from non-competing markets who meet several times a year to share their wisdom and learn from each other ways to improve their operations. Additionally, Don has earned the NAHB's [Certified Graduate Builder](#) (CGB) designation which identifies him as one of the building industry's top professionals. Additionally, he was one of the first in New Jersey to obtain the NAHB's [Certified Green Professional](#) (CGP) designation.

### Achievements/Memberships

- Named 2020 Builder of the Year by the Metropolitan Builders & Contractors Association of NJ
- Named Business Person of the Year from the Roxbury Area Chamber of Commerce and the Morris County Chamber of Commerce (1995)
- Earned the Certified Graduate Builder (CGB) designation and the Certified Green Professional (CGP) designation from the NAHB making him one of only about 1300 professional building contractors nationwide to attain the CGP certification
- Named 2010 Remodeler of the Year by the Community Builders & Remodelers Association of NJ
- Member of the following builder trade associations: [Metropolitan Builders & Contractors Association of NJ](#) (Metro BCA), New Jersey Builders Association (NJBA) and the [National Association of Home Builders](#) (NAHB)
- [NAHB Builder 20 Club](#) - member since 1997 and served as Chairman (2001-2002)
- Former President of the Roxbury Area Chamber of Commerce (1994)
- Eagle Scout (Troop 159 Succasunna, NJ 1981) & Committee Chairman of Boy Scout Troop #163, Succasunna, NJ (June 2005 – August 2014)
- Member of the First Presbyterian Church of Succasunna



# **Charles L. Baldanza, R.A. P.E. P.P.**

645 Westwood Avenue  
River Vale, N.J. 07675  
201-391-0020  
charlie@baldanzadesign.com

## **Education**

- Bard College, Bachelor of Arts, 1994
- NJIT, Master of Architecture, 2013

## **Work Experience**

- 2014-Present- Owner, Baldanza Design. Providing architectural, engineering and planning consultation for projects throughout New Jersey
- 2013-14- Project Manager at Inglese Architecture and Engineering, East Rutherford, NJ.
- 2011-2012, Architect Robert E. Donahue, Madison, NJ.
- 2008-2012, Owner, Intrepid Home Inspection, LLC, providing home inspections throughout NJ
- 1997-2011-, owner, Baldanza Construction Co., Montvale, NJ. I supervised the construction of approximately 44 single-family homes and 12 condominiums. My responsibilities included customer relations from the initial meetings to the final punch list items completed after the closing, along with coordinating construction specifications and scheduling subcontractors and material deliveries.
- 1994-1997 construction manager, Balder Construction Co, Park Ridge, N.J. construction of approximately 13 single-family homes

## **Licenses/ Certifications**

- New Jersey Registered Architect 21A101980400
- NJ Professional Engineer 24GE05632800
- New Jersey Professional Planner 33LI00630900
- New Jersey Building Inspector HHS 008367
- Member of the NJ Department of Community Affairs Code Advisory Board, term 2023-26

## **Associations**

- President, Builders Association of Northern NJ 2013-14, Chairman of the Board, 2015-18
- Member of the Board of Directors, New Jersey Builders Association
- Chairman of the New Jersey Builders Association Codes Committee
- Member of the New Jersey Builders Association Environmental Committee