At the end of this program, participants will be able to:

- Understand the differences between discretionary entitlements and ministerial entitlements, and what that means for project approval strategies.
- Develop an understanding of principles and strategies for use of the Alternate Materials and Means Request (AMMR) process in navigating permit approvals.
- Improve cooperation and dialogue between plan review professionals and design professionals to allow for great efficiency, better work product, improved code compliance, and reduced professional liability exposure.
- Engage design professionals as effective and innovative partners in the code and regulatory arenas in which they work.
Michael Malinowski AIA is president of Applied Architecture Inc. Since 1980, he has been providing adaptive historic re-use, urban infill, affordable housing, single family residential, and commercial revitalization design solutions. Projects include Galt Place (GaltCA, 2011), a mixed use urban infill project with a wood podium design featured in WoodWorks presentations and whitepaper; Globe Mill (SacramentoCA, 2008), an award winning historic adaptive re-use of an abandoned urban mill for senior housing; and Hotel Stockton (StocktonCA, 2006), award winning adaptive reuse of a National Historic Register property as affordable housing mixed use.

An alumnus of the University of Michigan Mike has been involved with the AIA for over 30 years. Prior to his election to the AIA National Board in 2011 Michael served as VP Communications for AIA California Council where he launched a CMS web platform, social networking, and virtual meeting protocols. In 2009 Michael was presented the National AIA Grassroots Excellence Award for Outstanding Individual Contribution - Organizational Efficiency for his work on virtual meetings.

President of the AIA Central Valley Chapter (2008), Mike

Ministerial Code Can’t Cover Everything
so sometimes …

a MAYBE enters the picture

The ability to consider Alternate Materials, Design, and Methods of Construction

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Performance Code Provision within our typical Prescriptive Code Framework

Building versus Planning

Getting to YES
I Codes: Section 104.11
Approval is required
Approval must be based on
Satisfactory
Compliance with intent of code
Alternate is AT LEAST the equivalent in quality, strength, effectiveness, fire resistance, durability and safety.
Fire resistance defined > chap 2 > 702.1: “that property of materials or their assemblies that prevents or retards the passage of excessive heat, hot gases or flames under conditions of use” In commentary: fire resistance is evaluated by testing in accordance with ASTM E119
Interpretive manual: Building official is expected to use sound technical judgement

104.11.1 Supporting data where necessary … shall consist of valid research reports from approved sources (reliability and accuracy)
104.11.2 Tests: Bldg official can require tests, by an approved agency; reports retained in the public records
Approvals cannot WAIVE code requirements
Burden of proof lies with applicant
Data is required: referenced standards, calculations, research reports;

I Codes: Section 104.11
Minnesota Codes: 1300.0110 Subp. 13
Alternative materials, design, and methods of construction and equipment. The code is not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by the code, provided that any alternative has been approved. An alternative material, design, or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the code, and that the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed in the code in quality, strength, effectiveness, fire resistance, durability, and safety. The details of any action granting approval of an alternate shall be recorded and entered in the files of the Department of Building Safety.
Subp. 13. Alternative materials, design, and methods of construction and equipment. The code is not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by the code, provided that any alternative has been approved. An alternative material, design, or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the code, and that the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed in the code in quality, strength, effectiveness, fire resistance, durability, and safety. The details of any action granting approval of an alternate shall be recorded and entered in the files of the Department of Building Safety.


The code official may approve performance-based fire and life safety designs if the code official finds that the proposed design has been conducted by an approved method. Approved performance-based designs are evidence of compliance with the intent of the code. Approvals under this subpart are subject to the approval of the building code official whenever the design involves matters regulated by the building code.

A. Design goals, objectives, and performance criteria shall be approved by the code official before submission of a performance-based design report, calculations, or analysis results. As a minimum, an approved performance-based design shall address the following objectives:

1. Life safety of occupants;
2. Firefighter safety;
3. Property protection;
4. Continuity of operations; and
5. Safeguarding of the environment.

B. To determine the acceptability of a performance-based design, the code official may require the owner or agent to provide, without charge to the jurisdiction, a technical opinion and report. The code official may require the technical opinion and report to be prepared by, and bear the stamp of, a licensed design professional.

C. Performance-based designs shall be prepared by, and bear the stamp of, a licensed design professional competent in the area of work. The design professional shall provide written confirmation to the code official before a certificate of occupancy is issued that the performance-based design has been properly implemented, the operation or use of the building is within the limitations of the design, and adequate controls are in place to maintain compliance with the conditions of the design throughout the life of the building.

Subp. 15. Tests. If there is insufficient evidence of compliance with the code, or evidence that a material or method does not conform to the requirements of the code, or in order to substantiate claims for alternative materials methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the municipality. Test methods shall be as specified in the code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall performed by an approved agency. Reports of the tests shall be retained by the building official.
Alternate Means restriction might also be in other places in code
- CBC section 1.8.7; has limitations restricting use for mobile homes and factory built housing; and scripted requirements

Case by Case basis required (no blanket approvals).
- PEX / Aquatherm examples: must be requested by each applicant

Evidence to substantiate claims for equivalent protection of life safety and health
- Accessibility AMR must meet threshold for ‘equivalent facilitation’

When is an AMMR may be a good choice
- **Innovations:** new materials; or new uses / patterns for existing materials
  - Example: CLT
    - “New Material” ?
  - May be only approach

- **New Design concept**
  - Atrium hotel; enclosed shopping mall; pedestrian bridge
  - May eventually end up in regular code

- **Complex geometries:** multiple construction types or simultaneous use of separate code provisions (Example: CapLofts)

- **Conundrums:** existing conditions; immovable objects
  - Size of an elevator; width of an existing stair
  - Six story open stair
  - Buildings built abutting with no seismic separation
  - Building built with windows on the property line; other buildings built over windows

Other paths for resolving such conundrums
- Existing building code provisions (Chapter 34)
- 2012 International Existing Building Code;
- Alternative Compliance approach of 3412 (point system)
- Historic Considerations
  - POB vs Historic Building: 50 years old; significant character?
  - List/Registry? Create One (Public/Private Partnership)?
• Solving ‘political’ problems
  – Examples: Buried conflicts (buried sewer line runs under building); property line runs through building; past changes done without permits; 85 year old planning moving to retirement home; cleaning up guilt over a 40 year old remodel done without permits; used ‘panelized system’ for a room addition now would like a permit

• Resolving Interpretation Differences
  Other Options besides AMMR’s
  – Bring in a consulting Expert
  – Appeals Board
  – Negotiation

When an AMMR may not help
• Solving budget problems
  – Cost can’t be a basis for alternative; code official’s mandate is to protect the public

• Solving time problems
  – Time to process an AMMR request may be substantial; uncertainty involved as the path is not ‘scripted’; incentive to invest time/money on public side to evaluate and consider options may be a factor
  – Example: SOVENT plumbing system, and union financed study

• When meeting the intent of the code just does not seem possible
  – Some things should just plain not be built!

Approaching the AMMR process
• Follow the Script
  • Local AHJ (authority having jurisdiction) form, steps, criteria
REQUEST FOR CODE ALTERNATE, INTERPRETATION, MODIFICATION

APPLICANT INSTRUCTIONS

The Minnesota State Building Code (MSBC) allows for construction methods that may not comply with the specific wording in the code. Minnesota Rule 1300.0110 allows for alternatives, interpretations, and modifications to the MSBC that provide code compliance in some other way than stated in the code. All alternatives, interpretations, or modifications must be reviewed by the building official. In order to be accepted, the applicant for an alternate, interpretation, or modification must prove that it complies with the intent of the code and is equivalent in quality, strength, effectiveness, fire resistance, durability, and safety to the code requirement.

In order to be accepted for consideration as an alternate, interpretation, or modification a submittal must provide the necessary information. Please review the following information for use in preparing your request:

- Review Minnesota Rule 1300.0110 for an explanation of the requirements for your

Approaching the AMMR process

- Adjust your Perspective
  - Change from Designer hat (weighing code, appearance, function, cost, construction schedule, … etc) to Code Official Hat (protect the public health safety welfare).
  - Conservative.
  - Documents.
  - Testing.
  - Adopted standards.
  - Innovation not part of the mix; or happy client …

Approaching the AMMR process

- Find a foundation in the adopted code
  - Interpretive manual
  - Published reports : Code Corner for example
  - Find similar situations in the code: windows in fire resistive elements: how are they addressed?
  - Code ‘tricks’
    - Special Provisions
    - Horizontal exit
    - Imaginary Lines

Getting to YES

Approaching the AMMR process

- Find examples that have been approved
  - Open book: public vs private information
  - Peers
  - Built projects
  - Experts: Has it been done before in some fashion?
Approaching the AMMR process

• Start with an outline
  • Applicable code sections
  • What is intent
  • How else can intent be met

• Get in Agreement before getting in too deep
  • Meet and discuss ideas for approach

Getting to YES

Approaching the AMMR process

Getting to YES

Minneapolis Building Officials

City of Lakeville  MN1215  Abbott, Eric E. 952.985.4400
City of Landa  MN2276  Buck, John 651.739.4123
City of Lauderdale  MN0858  Aske, Duane 651.702.7600
City of LeCenter  MN2759  Block, Corey R. 507.357.4540
City of Lester Prairie  MN2043  Quade, Burt 952.442.7500
City of Le Sueur  MN0238  Murphy, Daniel J. 507.665.4941
City of Lewiston  MN1034  Carlin, Steven E. 507.523.2277
City of Lexington  MN0756  Nilbr, Monte 763.784.2732
City of Lyndale  MN1812  Neameyer, David E. 651.447.2316
City of Lindstrom  MN2800  Colberg, Jusrin A. 651.257.0820
City of Ona Lakes  MN2300  Moonen, Patrick 651.982.2400
City of Winsted  MN2214  Teves, Jim D. 218.409.7291
City of Little Canada  MN2022  Waterhaus, Stephen J. 651.766.4029
City of Little Falls  MN2785  Barndy, David A. 320.615.5200
City of Long Lake  MN0599  Kohsio, Loren E. 952.473.6961
City of Lonsdale  MN1318  Filipak, James Myles 507.744.2207
City of Loretto  MN0589  Kohsio, Loren E. 763.479.4306
City of Luverne  MN2121  Delghehse, Daniel 507.449.5031
City of Madison Lake  MN2159  Voit, Ronald L. 651.243.3011
City of Mahnomen  MN1551  Eggan, Benjamin E. 651.426.3344
City of Manchester  MN2132  Sorensen, Wayne P. 507.826.3222
City of Minneapolis  MN3541  Bisanzo, Thomas G. 612.378.3787
City of Mindoro  MN1751  Kruger, Jay A. 507.633.5107
City of Maple Grove  MN1281  Davidson, Richard Kenneth 763.494.8601
City of Maple Lake  MN2089  Kohsio, Loren E. 320.963.3611
City of Maple Plain  MN0884  Kohsio, Loren E. 763.479.0515
City of Maplewood  MN1520  Fisher, David G. 651.249.2300

Code Modification Request

Project:  Condominiums
Scottsdale, Arizona

To:  City of Scottsdale
Planning & Development Services Department
7447 E. Indian School Road, Suite 100A
Scottsdale, Arizona

P:  480.312.9445
F:  480.312.9442
www.specsandcodes.com

This code modification request is for the following code and section(s):

Section(s):  721.6

Specifications
Building Code Analysis

In accordance with Section 141.5, Alternate Materials, Design and Methods of Construction and Equipment, the following information is submitted for consideration as an alternate method or material. This Request is not to be construed as waiver but as means of achieving the intent of the Code section through an equivalent method or material not considered by the prescriptive
Part 1 – Review of Code Requirement

The following are direct quotes from the Code with portions of the sections highlighted to indicate those areas where this Code Modification Request is being considered:

Section 721.4 Wood assemblies:

The provisions of this section contain procedures by which the fire-resistance ratings of wood assemblies are established by calculations. Section 721.4.3(a) indicates the time assigned to members on the fire-exposed side.

Part 2 – Statement Regarding Compliance

In this region of the United States, portland cement plaster (i.e., stucco) has been used extensively in the construction of residential buildings. In many cases, these locations require a 1-hour fire-resistance rating due to the construction type of the building or some other provision of the Code.

A conforming reference material to Table 721.4(a) is an automatic reassembly for stucco applied to a roof condition, set on an exposed or unexposed condition, only a floor condition is provided (Item Number 131.2).

Due to the requirement of time assignments for materials in the Code, not all members and floors are allowed in each of the basic material assemblies. For example, each of the time assignments for finishes provided in the concrete assemblies section of Chapter 7 are not duplicated in the wood assemblies section, whereas each of the time assignments for membranes in the wood assemblies are duplicated in the concrete assemblies section.

This Code Modification Request is not to waive the requirement for a 1-hour fire-resistance rating, but to develop an equivalent fire-resistance-rated assembly using materials based on information published in the Code.

Part 3 – Proposed Alternate Material/Method

This Code Modification Request provides a calculated method to achieve similar results for a fire-resistance-rated stucco system applied in a horizontal condition to the underside of a roof/ceiling assembly.

### Examples

- Exposed Unprotected Wood in a One Hour building
  - KISS principal
  - Type V vs IV Construction
  - Mixing construction types?
  - Calculated fire resistance

---

**Getting to YES**
Messy Historic Building Conditions:
Windows on property line
Interior Light Wells
Missing Egress windows
Four story open stair
Unreinforced masonry and weak front
Projections over Property Line
Existing Conditions that do not meet code
Complex / Mixed Construction types, Occupancies, Proximity to Property line or Assumed Property lines

Getting to YES

Historic 6 story classified as Type 1B

New Construction
Type VA
Three story with mezzanines
Over Two level 1A Podium
AGREEMENT AND COVENANT NOT TO CONSTRUCT

This Agreement is entered into as of the __________ day of May, 2011 between Regency LLC, a California limited liability company ("Property Owner"), and the City of Sacramento, a municipal corporation ("City").

RECITALS

WHEREAS, Property Owner owns certain property located in the City of S
http://www.specsandcodes.com/

How Can You Change a Building Code?

by Ronald L. Greten, AIA, NCII, CI, CLT, CLIA

I’m sure that most of you who work frequently with one or more of the locally adopted codes have come across a requirement that seems to make no sense, or has been rendered obsolete by new methods, or materials. What some of you may not know is that ANTBODY can submit a proposal for a code change from the International Code Council (I.C.C.) and the National Fire Protection Association (NFPA) provide open processes that allow changes to their published codes and standards.

Codes are written to accommodate all types of construction at a national, and currently, international level. Specific code requirements can be added, modified, or deleted at the local level to reflect local conditions and laws. Many previous and existing codes are written in their local code adoption process. This is a good opportunity to make a change without having to go through the process at the national level.

An excellent example of how anyone can sponsor a code change is illustrated in the story behind the change in use of wired glass.

A Reason for Change

In 1977, the Consumer Product and Safety Commission (CPSC) developed a safety glazing performance standard titled 16 CFR 1201 “Safety Standard for Architectural Glazing Materials.” This standard increased the minimum performance over that required by ANSI Z97.1, the industry standard up until that time. However, wired glass, which was the only fire-rated glazing at the time, could not pass the more restrictive standards of CPSC 16 CFR 1201. So, CPSC established a “temporary” exception that allowed the use of wired glass in fire doors and windows until industry developed products that met the
Guideline on Fire Ratings of Archaic Materials and Assemblies (February 2000, 184 p.)

Older buildings often contain materials that are fire safe but not listed in current fire ratings sources. This lack of documentation hinders the modernization and reuse of our nation's building stock. The Guideline on Fire Ratings of Archaic Materials and Assemblies is a compilation of fire ratings from earlier sources for a wide variety of materials and assemblies found in buildings from the nineteenth to the mid-twentieth centuries. This guideline also provides methods for calculating the fire resistance of general classes of archaic materials and assemblies for which no documentation can be found.

First published in 1980, this guideline has found widespread use and acceptance among architects, engineers, preservers, and code officials. It has been incorporated into numerous state and local building codes, three model code publications, and two NFPA.

The Theoretical Approach

Theoretical methods offer an alternative to the full-scale fire tests discussed above. For example, most codes allow alternate materials and methods to be used based on test data and engineering analysis in lieu of full-scale tests. These analyses may draw upon computer simulations of an overall assembly's. The Hamathy's Ten Rules of Fire Endurance Rating

Rule 1. The "thermal" fire endurance of a construction component or a member or parallel layers is greater than the sum of each "thermal" fire endurance that is characteristic total assembly; average temperature increases of 25°F above ambient.}

Hamathy's Ten Rules of Fire Endurance Rating

Rule 1. The "thermal" fire endurance of a construction component or a member or parallel layers is greater than the sum of each "thermal" fire endurance that is characteristic

Rule 2. The fire endurance of a construction does not decrease with the addition of further layers.

Hamathy notes that this rule is a consequence of the previous and that the additional layers will increase the remains exposed to heat and the heat capacity of the construction. This is in turn, reduces the rate of temperature rise at the protected surface.

Rule 3. The fire endurance of a construction should not be increased because the wood framing is exposed to the fire. The temperature is measured at the interface of the assembly and the protective membrane.

Rule 4. The fire endurance of a construction does not decrease with the addition of further layers.

Hamathy notes that this rule is a consequence of the previous rule and that the additional layers increase both the resistance of the structural elements and to greater temperatures for longer periods of time, and could cause premature structural failure of the supporting members.

Rule 5. The fire endurance of a construction should not be increased because the wood framing is exposed to the fire. The temperature is measured at the interface of the assembly and the protective membrane.

Rule 6. The fire endurance of a construction does not decrease with the addition of further layers.

Hamathy notes that this rule is a consequence of the previous rule and that the additional layers increase both the resistance of the structural elements and to greater temperatures for longer periods of time, and could cause premature structural failure of the supporting members.
The Theoretical Approach

Theoretical methods allow for the determination of fire endurance criteria that are based on sound engineering principles. These methods provide a means to assess the fire resistance of a structure and to design buildings that meet or exceed the minimum requirements as outlined in building codes. The following sections provide an overview of the theoretical approach to fire endurance calculations.

Hammathy's Ten Rules of Fire Endurance Rating

Rule 1: The "thermal" fire endurance of a construction consisting of a number of parallel layers is greater than the sum of each layer’s thermal fire endurance that is characteristic.

Rule 2: The fire endurance of a construction does not decrease with the addition of further layers.

Hammathy's rule is a consequence of the previous rule. As a general principle, the addition of further layers should be expected to enhance the fire resistance of the construction. However, the rule also notes that the addition of layers should be done with care, as improper placement or insufficient layering can result in a decrease in fire endurance.

Rule 3: The fire endurance of a construction is equal to the minimum fire endurance of its individual elements.

When load-bearing elements are tested separately, the imposed load is constant and equal to the design load throughout the test. By definition, no fire can be transferred from one element to another, so the fire endurance of the entire construction is no greater than the minimum fire endurance of its individual elements. This rule applies to all fire endurance calculations.

Rule 4: The fire endurance of a construction is equal to the minimum fire endurance of its individual elements.

This rule applies to all fire endurance calculations, as the fire endurance of a construction is determined by the minimum fire endurance of its individual elements. This rule is important because it ensures that the fire endurance of the entire construction is not greater than the minimum fire endurance of its individual elements. This rule is particularly important when testing load-bearing elements, as the fire endurance of the entire construction is dependent on the fire endurance of its individual elements.

Rule 5: The fire endurance of a construction is equal to the minimum fire endurance of its individual elements.

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Rule 6: The fire endurance of a construction is equal to the minimum fire endurance of its individual elements.

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Rule 7: The fire endurance of a construction is equal to the minimum fire endurance of its individual elements.

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Rule 8: The fire endurance of a construction is equal to the minimum fire endurance of its individual elements.

This rule applies to all fire endurance calculations, as the fire endurance of a construction is determined by the minimum fire endurance of its individual elements. This rule is important because it ensures that the fire endurance of the entire construction is not greater than the minimum fire endurance of its individual elements. This rule is particularly important when testing load-bearing elements, as the fire endurance of the entire construction is dependent on the fire endurance of its individual elements.

Rule 9: The fire endurance of a construction is equal to the minimum fire endurance of its individual elements.

This rule applies to all fire endurance calculations, as the fire endurance of a construction is determined by the minimum fire endurance of its individual elements. This rule is important because it ensures that the fire endurance of the entire construction is not greater than the minimum fire endurance of its individual elements. This rule is particularly important when testing load-bearing elements, as the fire endurance of the entire construction is dependent on the fire endurance of its individual elements.

Rule 10: The fire endurance of a construction is equal to the minimum fire endurance of its individual elements.

This rule applies to all fire endurance calculations, as the fire endurance of a construction is determined by the minimum fire endurance of its individual elements. This rule is important because it ensures that the fire endurance of the entire construction is not greater than the minimum fire endurance of its individual elements. This rule is particularly important when testing load-bearing elements, as the fire endurance of the entire construction is dependent on the fire endurance of its individual elements.

Examples of Hammathy's Rules

Hammathy provided several examples that illustrated his rules. These examples were useful in illustrating the application of the rules to practical cases.

Example 1: Problem

A building is to be constructed with a 4-hour fire resistance rating. The building is to be a 3-story structure with a flat roof. The building is to be constructed with concrete masonry units (CMU) on the exterior and a steel frame on the interior. The building is to be located in a high-risk fire area.

Solution

The building is to be constructed with concrete masonry units (CMU) on the exterior and a steel frame on the interior. The building is to be located in a high-risk fire area.

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Code compliance is the gold standard in determining the standard of care for Professionals.

- Code compliance insures that buildings are safe.
- Code is 'design and style' neutral.
- Uniform Code: the same result is achieved where ever and whenever it is applied.
- Direct and clear Code opinion from the source will take precedence over local official.
- Once a project's permit is issued, it is by definition in compliance with the code. Building final assures code compliance.

The objective:
- It's not just about speed.
- More efficient.
- More effective processes.
“Inefficient permitting processes are equivalent to a drain on economic development. Project delays lead to higher costs that either will be passed through to occupants or will discourage new construction. Less new construction, by reducing the total supply of buildings in a community, will tend to lead to higher rents for everyone,” said Linden Smith, Managing Director, PricewaterhouseCoopers. “Conversely, a municipality with an efficient and predictable permitting process will attract investment by reducing the risk of scheduling delays and cost overruns. All else equal, investment dollars will be drawn to these municipalities.”
Change is most likely in the face of crisis

and many if not most government entities which issue permits
are in some level of fiscal crisis.

It is critical that design professionals be in a leadership
position in this process

Streamlining is happening: with or without us
Permit Streamlining at its best is

Good for Architects
Good for the Environment
Good for the Local and Regional Economy
Good for the Community

Effective, Positive Streamlining Requires

Creativity, Persistence, Communication, Insight,
Knowledge of codes, regulations and standards
And

Leadership
The Permit Streamlining Landscape

- Administrative
- RoadMap
- Partnerships
- Technology
- PreQualification
- Self Certification

Administrative

- Establish goals and monitor progress
- Measurement/Feedback loop
- Wait Triage: drop off; pick up
- Acceptance Triage: professional plans versus first timer efforts
- Over the counter review for certain project types
- Field Permits for certain project types
- Staff cross training
- Code solutions database
- Customer service facilities
- Transparency

Road Mapping

- Concurrent Processing
- Rolling Review: starting plan check with an incomplete submittal
- How many review cycles is ‘normal’ One? Two? Five?
- Pre-approved templates
Partnerships

- Contract plan review
  - Consultant: outside resources
  - Staff overtime
  - Peer review
- Regional resource sharing
- Code Conversations
  - Connecting plan preparers and plan reviewers
- Development Oversight Commission
  - Private sector perspectives about Time and Money
- Getting the Customer to Success

AIA examples at National, Regional and Local levels:

**Development Oversight Commission**

**Region Builders**
Annual Recognition of Mayor/Jurisdictions making progress
Social Events: framework for Communication

**Code Conversations**
Bringing together Regional code officials, design professional for informal conversations

Technology

- Electronic Plan Check
  - save paper; may or may not save time
- Digital Seals and Signatures
- Web enabled field inspection
- Software based process tracking

Getting to YES
COST/BENEFIT

COSTS – Transitioning from paper documents to electronic documents is not easy, quick or cheap. It is however, efficient and will shorten the turn-around time for processing most permits. The cost will be different for each jurisdiction, because of the large number of variables involved in the transition. With a little creativity, it is possible to chart a course that starts with simple affordable procedures that utilize existing technologies and capabilities and evolves over time to a fully web based process.

PreQualification

- Experienced design professional: acknowledge the difference
- Project type preferences: Green/Solar; infill target sites; development preference corridors
- Adopt Document Standards
  - Florida Example
  - Training: win-win-win opportunities

A GUIDE TO CREATING BUILDING CODE COMPLIANT DOCUMENTS

INTRODUCTION

Construction documents are created to provide direction for the builder. At the heart of all construction documents submitted for permitting are the applicable provisions of the current edition of the Building Code. Creativity and constructability must be guided by the principles addressed in the applicable building code volumes that provide for a healthy, safe, accessible, and energy efficient structure or system.

A building permit is required for most construction projects, large or small, to document that the project complies with all applicable building code provisions. The building code specifies two levels of verification of compliance: plan review and inspection. The plan review verifies that the plans are code compliant. It is usually cheaper and easier to correct a non-code compliant condition in the design phase, than the construction phase. Once the local building department determines that a set of plans is code compliant, the permit is issued and a copy of the approved plans is returned to the applicant.

This guide is applicable to typical construction projects as follows:

- New commercial buildings
- Additions to commercial buildings
- Alterations of commercial buildings
- New systems (Mechanical, Electrical, Plumbing, Gas, Fire Alarm, Fire Sprinkler, Etc.)
- Alterations to systems:
- New One and Two Family buildings
- Additions to One and Two Family buildings
- Alterations to One and Two Family buildings

ABOUT THE GUIDE

This guideline has four parts:

- Plan review overview
- Government Sheet template
- Life Safety Plan example
- Area modification calculator
Professional Certification

• Plan review in part – or whole – by plan preparer or peer reviewer
  • Considerations for successful application
    By Professionals: liability considerations
    By Code official
    Political environment
  • Starting simply: TI’s, Residential Remodeling
  • Examples of where it is being used
    New York
    Hawaii
    Austin Texas
    Phoenix
    Chicago

Getting to YES

Permit Streamlining is not One Size Fits All

• Local perspectives differ
• Solve the actual problem, not the theoretical problem
  Example: digital seal and signatures
• Past efforts and history have an impact

Getting to YES

Permit Streamlining is not “One Size Fits All”

What works in New York City may not be good for Detroit or San Francisco
Six Common Themes

**Build Mutual Understanding.** Bring agencies, industry elected officials, and the public together to build mutual understanding for the permit process. Work together and educate all participants about how to be effective during permit review.

**Engage Reviewers and Stakeholders Early.** Connect with reviewers and stakeholders early, before application submittal, so critical design requirements and constraints can be identified and resolved in the process. Stakeholders may include local community groups as well as state and federal agencies.

**Ensure Complete Applications.** Define what constitutes a complete application, make this list clear to applicants, and require these items to be present at submittal. Educate applicants so they understand the requirements. Consider input from applicants when setting these requirements.

**Analyze Process, Performance, and Costs.** Analyze the process, its performance, and costs of service so applicants and reviewers know how to execute the steps. Mapping the full permit process can reveal opportunities for improvement and serve as part of the basis for determining permit fees.

**Use Information Technology.** Use technology such as electronic permit...
Streamlining Tool KIt – Fiatech/AIA/BOMA/…

Opportunities for Architects to be Leaders in Permit Streamlining

Sharing Information

www.permitstreamline.com
Questions?

This concludes The American Institute of Architects Continuing Education Systems Course

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