AI-Assisted Compliance Review for Architects

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Table of Contents

Chapter 1: Introduction to AI in Code Compliance

AI and building code compliance might not sound like the most exciting pairing, but it is actually one of the bigger opportunities to change how architects work day to day. Code review has always been a grind. You sit there with hundreds of code sections open, cross-referencing everything against your drawings, and the International Building Code alone runs over 700 pages. Miss something, and it comes back to bite you during permitting. AI can take a lot of that tedious checking off your plate, cut down review time, and catch things that tired eyes miss.

This chapter covers the basics of how AI applies to code compliance work. We look at where these tools came from, what they can actually do today, and how architects can start working them into their process without turning everything upside down. If you want to make a smart call about whether to adopt these tools, you need to understand what is under the hood first.

1.1. The Traditional Code Review Process

Code compliance review, the traditional way, follows a process everybody knows and nobody loves. You go through your design page by page, checking it against the building code, the zoning ordinance, the accessibility rules, the fire code, and whatever else your jurisdiction throws at you. And you do this over and over at different project phases. Every time the design changes, you are basically starting fresh on parts of it.

The manual review process presents several challenges. First, the sheer volume of applicable codes creates cognitive load that can lead to oversights. A typical commercial project must comply with the International Building Code, International Fire Code, accessibility standards such as the ADA and ANSI A117.1, energy codes, and local amendments. Each code contains thousands of individual requirements, and the interactions between codes add further complexity.

Time and Cost Implications: Research suggests that code compliance eats up 15 to 25 percent of total design time on complex projects. That is a lot of hours. And when a code mistake slips through to construction? Fixing it then costs way more than catching it on paper. Industry data shows that about 30 percent of the comments building departments send back are things the design team could have caught earlier.

Inconsistency in Review: People review differently. One architect catches things another one sails right past. Even seasoned professionals miss stuff when they are tired or rushing to meet a deadline. That kind of inconsistency creates real liability risk for firms and leads to project delays when the building department flags items that should have been addressed months ago.

Knowledge Management Challenges: Codes get updated on regular cycles, usually every three years for the model codes, and then local jurisdictions adopt changes on their own schedule. Keeping straight which code version applies where, and what the local interpretations look like, takes constant effort. It is institutional knowledge that is hard to build and easy to lose when people leave a firm.

1.2. Understanding AI and Natural Language Processing

Before examining specific applications, it is essential to establish clear definitions of the technologies underlying AI-assisted code review. These technologies have advanced rapidly, and understanding their capabilities and limitations helps architects evaluate tools and set appropriate expectations.

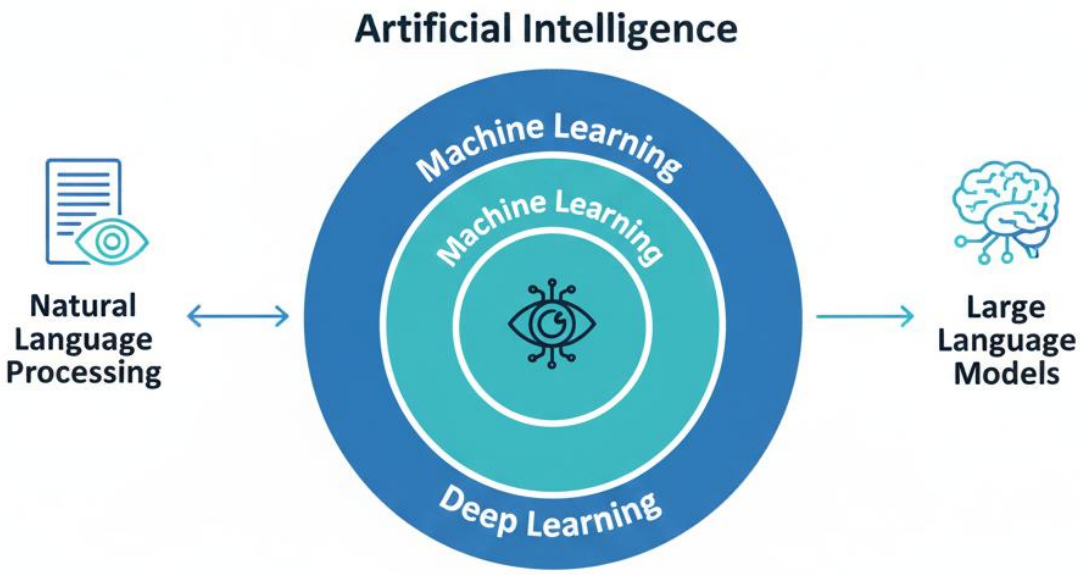
Artificial Intelligence: AI is the broad field of computer science that deals with getting machines to do things that normally take human intelligence. For code compliance, the relevant parts are understanding written language, recognizing patterns in drawings, reasoning about spatial relationships, and making judgment calls based on multiple inputs.

Natural Language Processing: NLP is a branch of AI concerned with enabling computers to understand, interpret, and generate human language. Building codes are written in technical but natural language, making NLP essential for AI systems that must parse code requirements, understand their meaning, and apply them to specific design conditions.

Large Language Models: LLMs like GPT-4, Claude, and others are the big recent leap in what NLP can do. They are trained on massive amounts of text and can follow complex reasoning, understand context, and give coherent answers. For code work, LLMs can read code language, answer questions about what a particular provision means, and walk you through the logic behind a requirement.

Computer Vision: Computer vision is how AI systems make sense of visual information from images and drawings. In a code compliance context, that means picking out walls, doors, stairs, and other building elements in floor plans, reading dimensions, recognizing symbols, and figuring out spatial relationships. All of which is data you need to actually check compliance.

The combination of these technologies enables AI systems that can read and understand both the regulatory text of building codes and the visual information in architectural drawings, then reason about whether the design satisfies the requirements.



1.3. The Promise of AI for Code Compliance

AI applied to code compliance opens up some real possibilities for how architects work. Here is where these tools can actually make a difference in your projects and your firm.

Automated Compliance Checking: AI can run through a design and check it systematically against code requirements, then flag anything that looks like a violation for you to review. A human reviewer tends to focus on the sections they know best and may skip past less familiar territory. An AI does not get tired and does not have favorite sections. Early testing of these tools shows they can catch 60 to 80 percent of the code issues that would otherwise get flagged during plan review.

Code Research and Interpretation: Instead of spending an hour flipping through code books trying to find the section you need, AI assistants let you ask questions in plain English and get back targeted answers with citations. Need to know the corridor dead-end limit for a Group B occupancy? Ask the question and the AI pulls the right section, accounts for the sprinkler exception, and gives you the answer.

Early Design Feedback: One of the biggest wins is getting compliance feedback early, when changes are cheap. Catching a major code issue at schematic design is a completely different situation than finding it after you have submitted for permit. AI tools make it realistic to run compliance checks at earlier stages than most firms bother with today.

Quality Assurance and Risk Reduction: Think of AI checking as a safety net under your existing review process. Run the AI check before your internal review meeting so the senior architects can spend their time on the hard interpretive questions instead of catching the obvious stuff. It does not replace their judgment. It just makes sure the basics are covered so they can focus where it counts.

The potential time savings from AI compliance tools are substantial. Pilot studies have demonstrated reductions of 30 to 50 percent in time spent on code review tasks. These efficiencies can improve project profitability while also reducing the stress and tedium associated with manual compliance checking.

Chapter 2: Building Codes and Regulatory Frameworks

If you want AI to do a decent job with code compliance, you need to understand how building regulatory systems are put together. This chapter goes through the major codes, how they are organized, and why they are so tricky for both humans and machines to interpret correctly.

2.1. Overview of Major Building Codes

The building regulatory landscape in the United States consists of model codes published by standards organizations, adopted and amended by state and local jurisdictions. Understanding this structure is essential for configuring AI tools to apply the correct requirements.

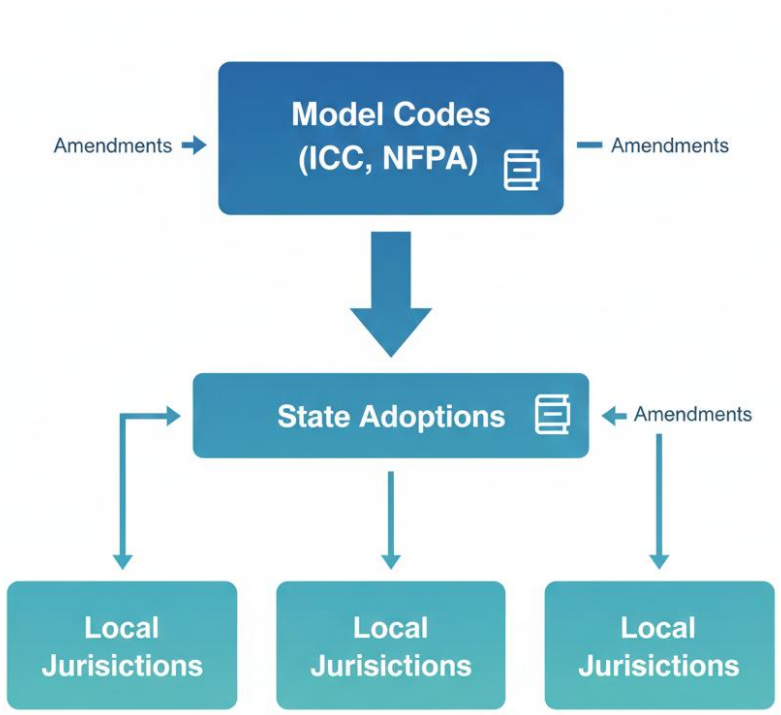
International Building Code: The IBC comes from the International Code Council and is the primary model building code used in all 50 states. It covers structural requirements, fire and life safety, accessibility, means of egress, building heights and areas, construction types, and occupancy classifications. The 2024 edition runs over 35 chapters plus all the referenced standards it pulls in.

International Fire Code: The IFC complements the IBC with requirements for fire prevention, fire protection systems, hazardous materials, and emergency planning. While the IBC focuses on building construction, the IFC addresses operational fire safety and applies throughout the life of the building.

Accessibility Standards: The Americans with Disabilities Act Standards for Accessible Design and ANSI A117.1 establish requirements for accessible routes, parking, restrooms, and other building features. These standards contain detailed dimensional and operational requirements that are well-suited to automated checking.

Energy Codes: The IECC and ASHRAE Standard 90.1 set the floor for energy efficiency. These codes involve real calculations for envelope performance, mechanical system efficiency, and lighting power densities. There is a computational element to compliance here that makes it a natural fit for AI tools.

Local Amendments: Almost every jurisdiction takes the model codes and tweaks them. Some add requirements, some delete provisions, some change thresholds. California built its own entire code system under Title 24. New York, Chicago, and Los Angeles each maintain extensive local codes with their own quirks. Any AI system worth using has to account for these jurisdictional differences, or it will give you wrong answers.



2.2. Code Structure and Interpretation Challenges

Building codes present unique challenges for AI interpretation. Unlike technical specifications with precise requirements, codes contain nuanced language, exceptions, and interrelated provisions that require contextual understanding.

Conditional Requirements: A huge number of code requirements come with "where" and "when" clauses that say the rule only kicks in under certain conditions. Corridor width, for example, depends on how many people are in the space, what type of occupancy it is, and whether sprinklers are installed. An AI system has to parse all those conditions and figure out which ones apply to your particular design. Get one wrong and the whole answer falls apart.

Cross-References: Codes reference themselves constantly. And they reference outside standards too. A single question about fire resistance for a shaft might send you to the height and area chapter, then the fire resistance chapter, then a specific section about that type of shaft. Following all those threads is tedious for humans and difficult to automate correctly.

Exceptions and Alternatives: Most code requirements include exceptions that modify or waive the base requirement under specified conditions. These exceptions may themselves have conditions and sub-exceptions. Tracking the full logic of requirements with all applicable exceptions challenges both human and automated analysis.

Interpretive Provisions: And then there are the parts of the code that just cannot be checked mechanically. Performance-based design provisions, equivalency clauses, and requirements that use words like "adequate" or "appropriate" call for professional judgment. No algorithm is going to solve those for you. This is where the architect's brain stays irreplaceable.

2.3. Digital Code Resources and Databases

The digitization of building codes has created opportunities for AI-driven analysis while also presenting challenges of data access and standardization.

Digital Code Platforms: The ICC and NFPA both offer digital code access through subscription platforms. You get searchable text, hyperlinked cross-references, and tools for tracking amendments. The ICC's Digital Codes platform even has an API, which is what lets AI compliance tools plug in and pull code data programmatically.

Code Databases: Several companies have created structured databases of building code requirements, converting prose code language into machine-readable formats. These databases capture requirement logic, conditions, and relationships in ways that support automated compliance checking.

Jurisdictional Data: Figuring out which code versions and amendments apply in which jurisdiction is its own challenge. The ICC and the Building Codes Assistance Project maintain databases of state and local code adoptions that AI tools can draw from. But the data is only as current as the last update, so there is always a lag.

The quality and accessibility of digital code resources directly impacts the effectiveness of AI compliance tools. Architects should evaluate how tools handle code versioning and jurisdictional variations when selecting platforms for their practice.

Chapter 3: AI Technologies for Code Analysis

This chapter takes a closer look at the AI technologies behind code compliance tools. You do not need to become an AI specialist, but knowing how the different approaches work helps you pick the right tool for the job and understand what the results actually mean.

3.1. Natural Language Processing for Code Interpretation

Natural language processing enables AI systems to read, understand, and reason about the text of building codes. Several NLP techniques are particularly relevant for code compliance applications.

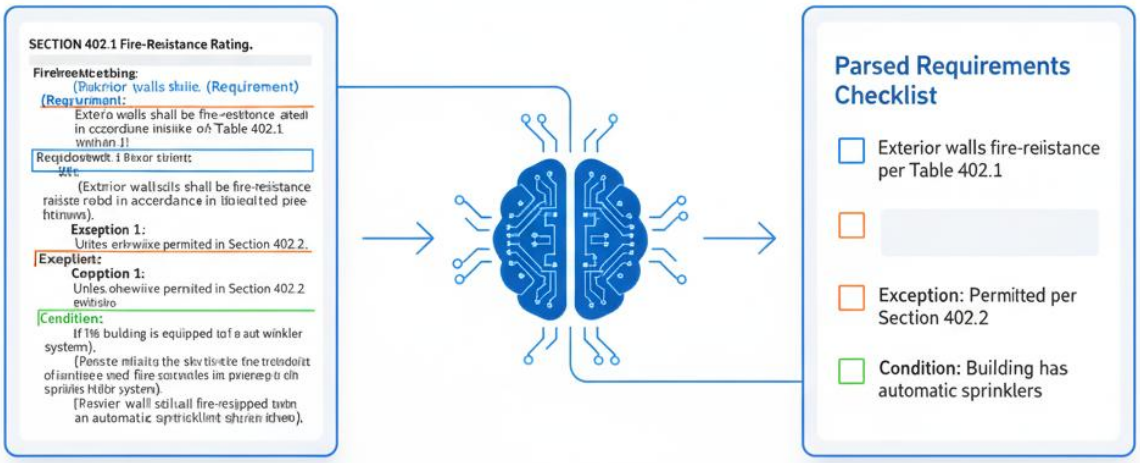
Semantic Search: Regular keyword search matches exact words, which is fine until the code uses different terms than you do. Semantic search understands meaning. So when you search for "stair width," it also finds sections that talk about "egress stairway" or "exit stair width" without you having to think of every possible phrasing.

Question Answering: Current LLMs can take a specific code question, pull information from multiple sections, and give you a straight answer. Ask "What is the maximum corridor dead-end length for a Group B occupancy?" and the AI finds the relevant IBC section, factors in the sprinkler exception, and tells you the number. No manual code navigation required.

Requirement Extraction: NLP can identify and extract specific requirements from code text, separating requirements from commentary, exceptions, and conditions. This structured extraction enables downstream compliance checking against design data.

Reasoning and Chain-of-Thought: The more capable LLMs can work through multi-step code logic. Give them a scenario and they will walk through determining the occupancy classification, applying the area modification factors, and arriving at what is allowed for height and area. They show their work, which is useful because you can check each step rather than just trusting the final answer.

The accuracy of NLP for code interpretation depends on model training and the quality of code source data. Architects should verify AI-provided code interpretations against source documents, particularly for novel or complex compliance questions.



3.2. Computer Vision for Drawing Analysis

Computer vision enables AI systems to extract information from architectural drawings, providing the design data needed for compliance checking.

Element Recognition: Computer vision can spot walls, doors, windows, stairs, and fixtures in floor plans and elevations. Object detection models trained specifically on architectural drawings can locate these elements and classify what type they are.

Dimension Extraction: AI can read dimension strings from drawings, associating measurements with the building elements they describe. Combined with scale recognition, this enables accurate dimensional data extraction for compliance checking.

Symbol and Annotation Recognition: Architectural drawings rely on standardized symbols for door swings, electrical devices, accessibility features, and so on. Computer vision can recognize these symbols and read associated annotations like door numbers and room names.

Spatial Analysis: Beyond just identifying individual pieces, AI can analyze how they relate to each other. Clearances, travel paths, adjacencies. That is what you need for checking things like accessible route continuity, egress travel distance, and fixture clearances.

The accuracy of computer vision analysis depends on drawing quality and consistency. CAD-generated drawings with clean linework typically yield better results than hand-drafted or heavily annotated documents. BIM-based analysis, discussed in Chapter 4, can provide even more reliable data by accessing the model directly rather than interpreting graphic output.

3.3. Knowledge Graphs and Rule-Based Systems

While machine learning approaches learn patterns from data, rule-based systems encode explicit compliance logic. Both approaches have roles in AI compliance tools.

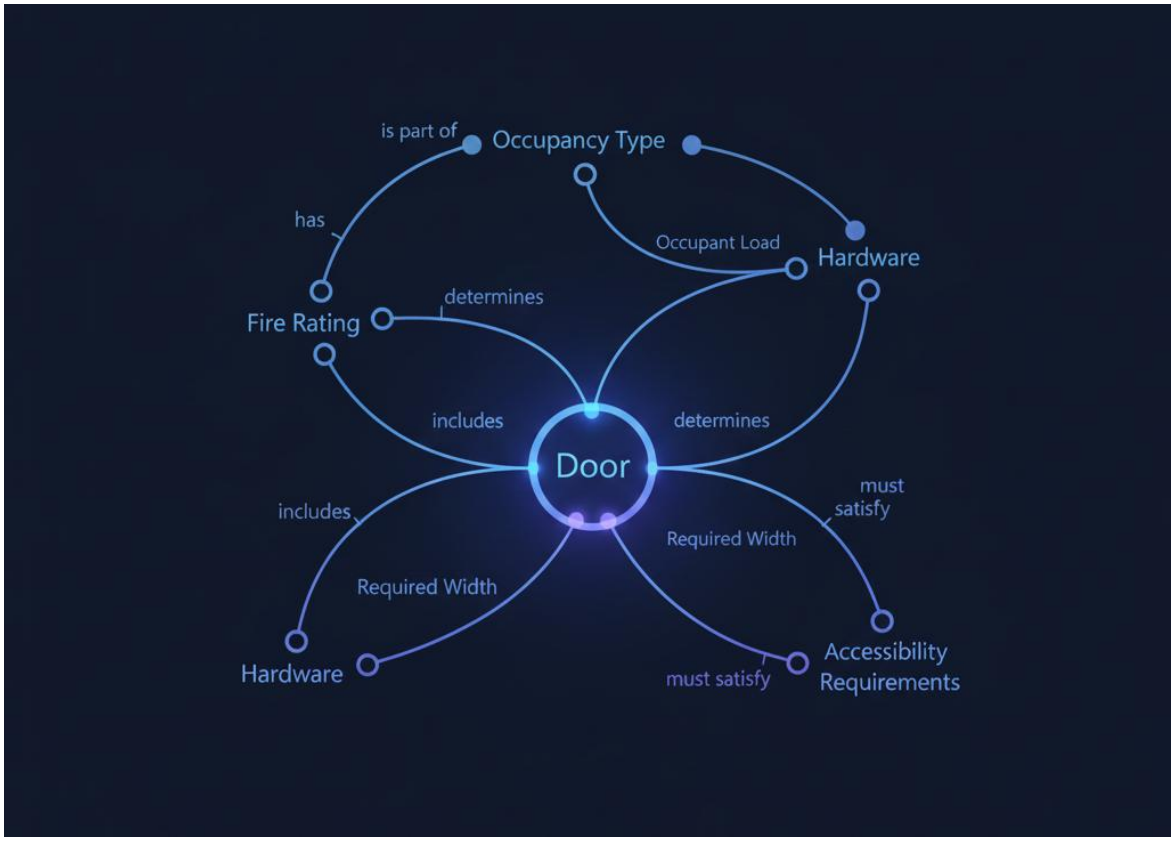
Knowledge Graphs: A knowledge graph maps out code requirements as a network of connected ideas. Building elements, code provisions, and how they relate to each other all go into a structured format you can query. For instance, a knowledge graph might show that a door serves a particular occupancy, that occupancy has a certain occupant load, and that occupant load dictates the minimum door width. Follow the chain and you have your answer.

Rule Engines: Rule-based systems take the logic of code requirements and encode it in a form a computer can execute directly. For straightforward prescriptive requirements with clear pass/fail criteria, rule checking is very accurate. And it can tell you exactly why something passed or failed, citing the specific code section and showing the math. That traceability matters when you are defending a design to a building official.

Hybrid Approaches: Most of the better AI compliance tools combine both approaches. Machine learning handles the messy parts, like reading drawings and interpreting natural language code

text. Rule engines handle the compliance logic itself. You get the flexibility of one and the precision of the other.

Explainability: This is a big deal for compliance work. Rule-based systems can tell you exactly why a design passes or fails a given requirement. They cite the code section, show you the design data, and lay out how one maps to the other. That kind of clear reasoning is what building officials expect to see, and it is what architects need when they have to justify their decisions.



Chapter 4: AI Applications in Compliance Review

Now we get into how these technologies actually show up in practice. This chapter covers the specific ways AI is being used to check buildings against code, from automated plan review to BIM-based checking and focused life safety analysis.

4.1. Automated Plan Review Systems

Automated plan review represents one of the most developed applications of AI in code compliance. These systems analyze architectural drawings and check them against code requirements, producing reports of potential violations.

Workflow Integration: These tools generally accept drawing files in the formats you would expect, PDF, DWG, images. You upload your sheets, tell the system which codes and jurisdiction apply, and it spits out a compliance report listing issues for you to look at. The better systems plug directly into your CAD software so the whole thing is less of a disruption.

Coverage and Accuracy: Right now, automated plan review systems can check several hundred specific code requirements. They cover areas like egress, accessibility, plumbing fixture counts, and fire separation. Accuracy depends on the type of requirement. Dimensional checks, where there is a clear number to hit, tend to do well. More judgment-based requirements are harder. Published accuracy rates run from 70 to 90 percent for the well-defined stuff.

Report Generation: Compliance reports typically list identified issues with references to specific code sections and locations on drawings. Better systems provide visual markup showing exactly where on the drawing each issue was identified. These reports serve as checklists for architect review and can document due diligence in the compliance process.

Building Department Adoption: Some municipalities are already using this technology on the review side. San Jose, Oklahoma City, and Las Vegas have all piloted AI plan review systems. The AI does not replace the human reviewer, but it speeds up the initial screening and catches the common issues more consistently. That means less back-and-forth and faster turnaround for applicants.

4.2. BIM-Based Compliance Checking

Building Information Modeling provides richer data for compliance checking than 2D drawings alone. BIM-based compliance tools can access geometric data, element properties, and relationships directly from the model.

Model Data Access: BIM models already contain explicit information about building elements, including their types, dimensions, materials, and properties. Computer vision is not needed here. The compliance tool queries the data directly. Relationships like room bounding and what spaces contain which elements are already built into the model structure.

Rule Checking Platforms: Platforms like Solibri and Autodesk Model Checker provide rule-based BIM compliance checking. Architects can run predefined rule sets or create custom rules for project-specific requirements. These tools report model elements that violate requirements and can generate clash reports for coordination.

AI-Enhanced BIM Checking: The newer platforms are starting to layer AI on top of traditional BIM rule checking. Machine learning helps interpret model data that might be incomplete or messy, classify spaces by their actual function, and figure out relationships that nobody explicitly modeled. The AI can also write up plain-language explanations of what it found, which saves time when you are working through the results.

Model Quality Requirements: There is a catch. BIM compliance checking is only as good as your model. If rooms are not defined properly, elements are classified wrong, or parameters are used inconsistently, the results will be unreliable. Most firms need a model preparation and validation step before running compliance checks. Garbage in, garbage out applies here like everywhere else.

4.3. Accessibility and Life Safety Analysis

Accessibility and life safety are where AI compliance tools have shown the most value so far. A lot of the requirements in these areas are prescriptive and dimensional, which is exactly the kind of thing machines are good at checking.

Accessible Route Analysis: AI can trace accessible routes through a building, starting from site arrival points and following the path through entries, corridors, elevators, and on to accessible spaces. Along the way, it flags barriers: slopes that are too steep, clearances that are too tight, doors that do not meet the requirements. The kind of item-by-item checking that is exhausting to do manually.

Fixture and Feature Compliance: Accessibility standards contain detailed dimensional requirements for restroom fixtures, drinking fountains, signage, and other building features. AI tools can measure these elements in drawings or models and verify compliance with reach ranges, clearances, and mounting heights.

Egress Analysis: For life safety, AI handles the number-crunching side of things. Occupant loads, exit capacity, travel distances, component sizing. It can trace egress paths and identify the most remote points and longest travel distances automatically. These are calculations architects have to do anyway, and AI just does them faster and more consistently.

Fire Separation Verification: BIM-based tools can verify that fire-rated assemblies provide continuous separation as required. The analysis identifies penetrations, unrated openings, and discontinuities that compromise fire barriers.

These applications demonstrate AI's value for requirement categories with clear, measurable criteria. More subjective code provisions require human judgment and are less amenable to automated checking.

Chapter 5: Implementation and Best Practices

Knowing the technology is one thing. Actually, putting it to work in your firm is another. This chapter covers the tools that are out there, how to fit them into your existing process, and what firms that have already done it learned along the way.

5.1. Commercial AI Compliance Platforms

A growing ecosystem of commercial products brings AI compliance capabilities to architectural practice without requiring in-house AI expertise.

Code Research Assistants: AI-powered code research tools help you find and interpret relevant sections faster. Companies like Up Codes, Code pal, and the ICC offer natural language search, code comparison features, and AI assistants that can answer your code questions on the spot. Less time flipping through code books means more time designing.

Plan Review Platforms: There are also platforms that take your drawings and spit out compliance reports. Archistar, Cove.tool, and municipal-focused solutions like e-PlanSoft all use AI to interpret drawings and run compliance checks. Some charge per project, others sell subscriptions.

BIM Integration Tools: For BIM-based workflows, tools from Autodesk, Nemetschek, and specialized vendors integrate compliance checking into the modeling environment. These range from rule-checking add-ins for Revit and ArchiCAD to cloud platforms that analyze uploaded models.

General AI Assistants: You can also use general-purpose tools like ChatGPT, Claude, or Gemini to answer code questions and work through compliance scenarios. They are most useful for research and interpretation rather than systematic checking, and you absolutely need to verify what they tell you. But for quick code lookups and reasoning through tricky provisions, they are surprisingly handy.

When evaluating commercial platforms, architects should consider code coverage, jurisdictional support, integration capabilities, accuracy validation, and total cost of ownership including subscription fees and training requirements.

5.2. Integration with Design Workflows

Effective AI compliance tools must integrate with existing design workflows to deliver practical value. Implementation approaches vary based on firm size, project types, and technology infrastructure.

Design Phase Integration: You get the most out of AI compliance tools by bringing them in early. Running a check at schematic design catches the big issues before you have invested weeks of design development. Then you check again through DD and CD as things evolve. The earlier you catch a problem, the cheaper it is to fix.

Quality Control Process: AI checking should sit alongside your human QC process, not replace it. A good workflow might look like this: run the AI check before your internal review, then have your architects focus their review time on the issues the AI flagged plus the interpretive stuff the AI cannot handle. Senior architect sign-off is still a must for anything complex.

Documentation and Records: The compliance reports these tools generate are useful records of due diligence. Keep them as part of your project documentation. They also come in handy when responding to building department review comments, since you can show you ran a systematic check and addressed the findings.

Training and Change Management: You need to train people on what the tool can do and, just as importantly, what it cannot do reliably. Set clear expectations about where AI fits in the compliance workflow. Provide ongoing support as the tools get updates. People who understand the limitations are less likely to over-rely on the tool and more likely to use it well.

5.3. Case Studies in AI Code Review

Real-world implementations demonstrate the practical benefits and lessons learned from AI compliance tools.

Large Architecture Firm Implementation: A top-100 firm rolled out AI code research tools across all their offices and trained staff on how to write good prompts. They saw a 40 percent drop-in time spent on code research and better consistency in interpretations between offices. What made it work: leadership bought in, they put real resources into training, and they wired it into their existing project management process rather than treating it as a side experiment.

Municipal Plan Review Pilot: San Jose brought in automated plan review as part of modernizing its permitting process. The system screens residential and small commercial projects, flagging common problems for the plan reviewer to focus on. Initial results showed a 30 percent reduction in first-pass review time and more consistent flagging of accessibility and egress issues across different reviewers.

Healthcare Project Application: A firm that specializes in healthcare deployed BIM-based compliance checking on hospital projects. Hospitals are notoriously complex from a code standpoint, pulling in the IBC, FGI Guidelines, and state health facility codes all at once. The tool caught coordination issues between architectural and MEP systems that would have cost serious money to fix during construction.

The common thread in all these cases: define what role AI plays in your workflow, do not expect miracles, invest in training, and actually act on what the tool finds. The firms that treat it as a time-saver but still take responsibility for the results are the ones getting real value out of it.

Chapter 6: Future Directions and Considerations

AI in code compliance is moving fast. This chapter looks at what is coming next and what you need to think about before you get too deep into these tools.

6.1. Emerging Technologies and Trends

Several technology trends are shaping the future of AI in code compliance.

Multimodal AI Models: Newer AI models can handle text and images at the same time. For code compliance, that could mean pointing at an element on a drawing and asking a code question about it, with the AI understanding both the visual and the regulatory context. That kind of interface would feel much more natural than what we have now.

Real-Time Design Feedback: As these tools get faster and plug more tightly into design software, checking code while you draw becomes realistic. Picture something like spell-check but for code compliance. You draw a corridor that is too narrow and the software highlights it in red before you even finish the line. We are not quite there yet, but it is not far off.

Generative Code Compliance: Instead of just telling you what is wrong, AI could start suggesting compliant solutions. Give it your design intent and the applicable codes, and it proposes configurations that satisfy the requirements. That would turn code compliance from a checking exercise into a design assist.

Automated Code Updates: When a jurisdiction adopts a new code edition, AI could scan your existing projects and tell you which designs are affected and what changes might be needed. That beats the current approach of hoping somebody remembers to re-check everything when the rules change.

The pace of AI advancement suggests that capabilities will continue to expand rapidly. Architects should stay informed of emerging tools while maintaining focus on practical value delivery.

6.2. Professional Responsibility and Ethical Considerations

Using AI for code compliance brings up some real professional and ethical issues that you cannot just wave away. These need serious attention.

Professional Liability: This is the big one. You are still on the hook for code compliance no matter what tools you use. AI does not transfer your liability or lower the standard of care. If the AI misses something and it ends up in the built project, that is your problem. Always verify what the tools tell you. And keep an eye on what your professional liability insurer says about AI tool use in their coverage language.

Accuracy and Reliability: AI tools can get things wrong. They miss violations. They throw false positives. You have to understand the limits of whatever tool you are using and keep a healthy skepticism about the output. Blindly trusting an AI compliance check without human review is asking for trouble.

Data Privacy and Security: Uploading project drawings to cloud-based AI platforms raises data privacy concerns. Project documents may contain confidential client information, and security of uploaded data must be evaluated. Firms should review vendor data handling practices and ensure appropriate protections.

Transparency with Clients: Be upfront with your clients about using AI in the design process. They will probably have questions about data handling, how reliable the tools are, and what role human review plays. Honest answers build trust. Hiding it just creates problems later.

Access and Equity: One thing worth thinking about: AI tools cost money and take time to learn. Firms that can afford them and figure out how to use them well will have an edge. Smaller firms and practices in underserved markets may get left behind. The profession should be paying attention to making sure access to these capabilities is reasonably broad.

None of this should scare you off from using AI. But it should make you thoughtful about how you use it. Professional organizations like the AIA are starting to put out guidance on responsible AI use, and it is worth following that conversation.

Conclusion

AI is changing how architects handle code compliance. Code research tools, automated plan review, BIM-based compliance checking, it all adds up to real gains in accuracy, speed, and consistency. The technologies covered in this course, from NLP to computer vision to rule-based systems, are becoming things that every architectural professional should understand at least at a working level.

But technology alone does not get you there. You need realistic expectations, good integration with your design process, trained staff, and a clear sense of where professional responsibility sits. AI tools work with you, not instead of you. The architect still owns the final call on compliance.

The firms that learn to use these tools well are going to be faster, carry less risk, and spend more of their time on the genuinely hard problems that require an architect's expertise and judgment. That is where the profession should be headed. And with the grounding this course provides, you are in a solid position to evaluate these tools, bring them into your practice, and get real benefit from them.

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