
ZONING CODE TEXT AMENDMENT

Initiator: Council President Bender and Council Member Schroeder
Introduction Date: February 9, 2018
Prepared By: Peter Crandall, Senior City Planner, (612) 673-2247
Ward: All
Neighborhood: All
Intent: To amend regulations related to exterior building materials.

APPLICABLE SECTION(S) OF THE ZONING CODE

- Chapter 530, Site Plan Review

BACKGROUND

The proposed zoning code text amendment, introduced by Council President Bender and Council Member Schroeder, would amend the site plan review standards related to exterior building materials for larger-scale residential, mixed-use, commercial, and industrial projects in the City of Minneapolis.

The purpose of the amendment is to establish clear standards for the regulation and implementation of exterior building materials on projects that are subject to Site Plan Review approvals. These generally include multi-family projects with 4 or more dwelling units, mixed-use projects, and new or expanded commercial or industrial projects.

Exterior building materials have a variety of impacts on the quality and safety of the built environment, including life-safety, building durability and sustainability, housing costs, and aesthetic compatibility with existing and historic building stock. Minneapolis has been experiencing strong growth in population over the last decade that has brought a significant amount of new development and new architectural technologies to the marketplace. The proposed amendment is intended to strengthen the City's ability to regulate and communicate the standards by which we evaluate new construction and to ensure a quality, lasting, affordable and beautiful urban built environment for all residents.

Building design and exterior materials have an equity component that relates directly to the city's goal of eliminating disparities between different communities within the city. Without clear design expectations that are codified, development is often shaped by less formal and more subjective processes at the local neighborhood level. Wealthier, more organized, and whiter communities that have a stronger political infrastructure and more time to dedicate to local development oversight have historically been more successful at pushing for higher-quality development and design products. Codifying standards creates more consistent and equitable outcomes rather than results being based on the expectations of the most active residents.

In 2014 CPED (Community Planning and Economic Development) began utilizing a set of guidelines related to exterior building materials that were intended to expand on a provision in the existing site plan review chapter related to material quality and durability. Those guidelines have since helped us to shape the design of a large number of approved projects. Part of the intent of this amendment is to codify and clarify material guidance so that CPED can clearly communicate to applicants and design professionals about the City's expectations and standards. Additionally, CPED has made some changes to the existing guidance based on concerns about material cost and affordable housing, specifically expanding the ability to use some cost-effective products such as fiber cement and metal panel.

CPED conducted a significant amount of research and outreach to establish the basis for the proposed amendment in partnership with stakeholders from the development community, affordable housing partners, design professions, and material manufacturers. CPED staff also conducted some field analysis of projects approved over the last 15-20 years to make our own observations of exterior building materials deployed in the built environment.

The Proposal

The proposed amendment introduces a new section into the Site Plan Review chapter and establishes a classification system for maintaining a hierarchy of exterior building materials. Material quality and performance is affected by a variety of factors. Some of the factors we considered and researched in developing the classification system include:

- 1. Material Composition** – What a material is made of is perhaps the single most important factor in measuring its quality as an architectural application. Some materials such as brick, stone, and glass have a long history of proven architectural quality in a variety of applications as well as a strong compatibility with the historic building fabric of Minneapolis. Other materials, like fiber cement, represent an evolving list of products that combine several components or ingredients into one composite system, often in

panelized form. Our research has found that material systems that incorporate a larger proportion of natural and proven components such as portland cement, limestone, or glass fibers tend to be stronger and higher quality than ones that contain a significant amount of chemical or synthetic additives, wood particles, or fly ash.

2. **Application Method** – How a material is applied to a building’s façade has a lot to do with how it will perform over time. One of the biggest issues when it comes to material success or failure for exterior applications is moisture. A high-degree of architectural detailing is required to either keep moisture out of a building, or to allow it to travel out so as not get trapped inside the building envelope and cause damage to the structure. This is particularly critical in a climate like Minneapolis where the temperature swing over the course of a year is so drastic and the freeze/thaw cycle can be especially punishing to building exteriors. Materials like stucco and fiber cement are especially vulnerable to moisture infiltration and will fail if exposed to moisture that is not properly mitigated over time. One of the best methods for avoiding moisture problems is to design facades with rainscreen principles and best practices. Rainscreens are systems that allow air to travel behind the exterior finish material to remove excess moisture and keep the exterior building envelope dry. Materials that are glued or fastened directly to a building façade without a way for moisture to travel out of the system are more likely to fail over time. The proposed amendment encourages the implementation of moisture mitigation systems where feasible.
3. **Appearance** – Some materials are better suited for integration with the historic and contemporary building fabric of Minneapolis than others. Additionally, some materials are more prone to aesthetic degradation over time. This can be due to a variety of factors including installation and maintenance as well as material composition and detailing. In general, however, materials like stone, brick, glass, finished concrete, and certain kinds of metal, require less maintenance and are less likely to change in appearance over time. Some types of single-skin metal panel systems are particularly prone to “oil canning” or subtle warping in their visible texture. Stucco products are prone to cracking and staining. Unfinished fiber cement products may require painting or refinishing and can be compromised easily by leaks from mechanical venting or façade penetrations. While appearance is not the primary factor in classifying materials, it is a consideration supported by adopted planning policy.

Based on these considerations, three (3) material classes are proposed as follows:

Material Classification

Class I	Class II	Class III
<ul style="list-style-type: none"> • Brick Masonry • Stone Masonry • Cast Stone Masonry • Precast Concrete • Concrete, Architectural Finish • Metal Panel • Glass Wall System 	<ul style="list-style-type: none"> • Fiber Cement Panel • Fiber Cement Lap-siding • Stucco 	<ul style="list-style-type: none"> • Concrete Masonry Unit, Architectural Finish • Concrete Masonry Unit, Unfinished* • Concrete, Unfinished* • Wood • Wood Composite Lap Siding

**Unfinished concrete and concrete masonry units shall not be used on any primary building elevation or any elevation facing a public street, sidewalk or on-site parking lot.*

The material classification will be applied to new development projects based on two factors; use and scale. In particular, the system proposes to make a distinction between different scales of residential and mixed-use projects understanding that there are particular economies of scale that allow for larger projects to implement a higher amount of high-quality materials without compromising affordability. Additionally, larger projects are

more prominent, have greater public realm impacts, and are often built to a scale that requires a higher degree of material performance and technology that lower quality materials do not meet.

Material distribution on building elevations will be measured per elevation, excluding window and door area. Specific guidance is maintained to ensure that building elevations are largely given the same treatment on all sides. The distribution of material classes will be based on percentages of the measured elevation and regulated as follows:

Material Application

Building Type	Class I	Class II & III*
Residential / Mixed-Use (4-150 units)	30-100%	0-70%
Residential / Mixed-Use (151+ units)	60-100%	0-40%
Commercial / Industrial / Institutional	70-100%	0-30%

**Class III materials shall not constitute more than 30% of any building elevation*

An important function of the site plan review chapter to understand is the provision of *alternative compliance*. The zoning code allows the zoning administrator or City Planning Commission to grant alternatives to any site plan review requirement where, “the alternative meets the intent of this chapter and the site plan includes amenities or improvements that address any adverse effects of the alternative,” or, “Strict adherence to the requirements is impractical because of site location or conditions,” or, “The proposed alternative is consistent with applicable development plans or development objectives adopted by the city council...” With regard to exterior building materials, alternatives to the adopted classification and application standards, or materials not classified under the adopted standards, may be considered and granted alternative compliance under this provision provided that they meet one of these findings. This provision also allows staff and the Planning Commission to consider materials not currently represented by the current classification system to determine their appropriateness or equivalence under the evaluation criteria.

In addition to implementing the regulatory changes, staff will work to create a guide that explains the distinctions between the defined material classes and their application with respect to the proposed design guidelines and standards.

ANALYSIS

What is the reason for the amendment and what public purpose will be served?

The proposed amendment is intended to codify and clarify the City’s standards with respect to the regulation of exterior building materials. The Minneapolis City Council has adopted policy regarding building design and development intended to deliver a built environment that is safe, inviting, active, livable, affordable, and sustainable, and the proposed amendment brings the City closer to those goals by ensuring that new development provides a lasting and valuable contribution to our urban environment.

How is the amendment consistent with the purpose of the zoning district(s) or ordinance chapter(s) being amended?

Site Plan Review is the primary chapter of the zoning code that evaluates building and site design including elements like window requirements, principal entrances, landscaping and screening, lighting, and crime prevention through environmental design. Exterior materials regulation is consistent with the general spirit and intent of the Site Plan Review chapter because it relates to overall building design in a variety of ways including

durability, pedestrian experience, and visual interest of new projects. The alternative compliance measure that is available to the Planning Commission and Council in evaluating projects provides a significant amount of flexibility in granting approval to alternative materials or design proposals that meet the intent of the ordinance without the need for a variance.

Are there consequences in denying this amendment?

Denying the amendment would likely lead to some confusion over the status of current exterior material guidance. Part of the goal of the amendment is to clarify and codify our policy guidance into our regulatory framework so that expectations can be clearly communicated to development applicants and partners. Additionally, it would deny CPED and the City the ability to implement policy with regard to building design during a time when the city is experiencing significant growth and could lead to the implementation of a lower quality built environment.

What adverse effects may result with the adoption of this amendment?

CPED staff has been implementing a very similar set of design guidelines in the development review process for the past several years. As such, staff has a good set of projects and experiences to draw confidence from in the implementation of this ordinance. No major problems are anticipated, and in fact, staff finds that the proposed amendment will bring additional clarity to the development review process and stronger tools to the department and the City Planning Commission in evaluating potential projects.

A significant amount of internal and external outreach has been conducted in order to reach for consensus among our development partners, including members of the development community, design professions, and affordable housing colleagues. Staff has concluded that the proposed amendment represents a fair and comprehensive assessment of that input. We have been particularly sensitive to the issues of design creativity and affordability, recognizing that the City has a strong interest in supporting our design and architectural partners in executing successful projects and in helping to deliver affordable housing for all residents that is also of high-quality.

How does the amendment relate to other City ordinances?

The zoning ordinance is the primary way for the City to address the durability and quality of exterior building materials. The building code focuses primarily on the safety of exterior materials, including fire resistance and opening protection ratings. In addition, exterior materials are regulated by guidelines applicable to historic districts and individual historic landmarks pursuant to Chapter 599, Heritage Preservation Regulations. In many instances, historic guidelines include stricter standards than the minimum requirements of this zoning code amendment. In such instances, the applicable development must comply with the stricter standards. It's expected that a project that complies with historic guidelines will typically meet or exceed zoning code standards.

What factors are influencing the timing of the proposed amendment? Why?

The amendment is timely in that Minneapolis continues to experience significant growth and development, especially in the multi-family housing sector. CPED is interested in ensuring that this new wave of development represents a lasting and quality addition to the Minneapolis built environment and that our regulations and standards are clear and accessible to our partners in the development community.

Additionally, the implementation of the Minneapolis 2040 Comprehensive Plan has opened up significant new areas for development and growth at every scale. The plan includes adopted policy related to ensuring that our built environment continues to have a high-degree of visual quality and durability and that new development creates a lasting addition to the city's architectural identity and heritage.

How does the amendment compare to practices in other cities?

Many cities incorporate design guidelines or regulatory tools to regulate building design and materials. Cities that staff researched for best practices include Boise, ID, Madison, WI, and San Francisco, CA. Additionally, neighboring municipalities like Woodbury and Eagan incorporate very similar material classification systems in their zoning codes.

How will this amendment implement the comprehensive plan?

The amendment will implement the following applicable goals of *Minneapolis 2040* (2020):

- Goal 1. Eliminate disparities: In 2040, Minneapolis will see all communities fully thrive regardless of race, ethnicity, gender, country of origin, religion, or zip code having eliminated deep-rooted disparities in wealth, opportunity, housing, safety, and health.
- Goal 3. Affordable and accessible housing: In 2040, all Minneapolis residents will be able to afford and access quality housing throughout the city.
- Goal 6. High-quality physical environment: In 2040, Minneapolis will enjoy a high-quality and distinctive physical environment in all parts of the city.

The following policies and action steps from *Minneapolis 2040* (2020) apply to this proposal:

Policy 5. Visual Quality of New Development

- a. Allow and encourage a variety of architectural styles.
- c. Ensure that exterior building materials are durable, sustainable, create a lasting addition to the built environment, and contribute positively to the public realm and reflect existing context.
- d. Require that the appearance and materials of the rear and side walls of new buildings are similar to and compatible with the front of the building.
- g. Apply design standards, guidance, and regulation consistently across the city regardless of market conditions or rent structure of development.
- n. Encourage institutional uses and public buildings and facilities to incorporate architectural and site design that is reflective of their civic importance and that identifies their role as focal points for the community.
- s. Balance visual quality of new development, including articulation of buildings, with energy efficiency of new buildings.

This amendment will help ensure a high-quality built environment, as consistent with the above policies of the comprehensive plan.

RECOMMENDATIONS

The Department of Community Planning and Economic Development recommends that the City Planning Commission and City Council adopt staff findings to amend Title 20 of the Minneapolis Code of Ordinances, as follows:

A. Text amendment to amend the site plan review standards for exterior building materials.

Recommended motion: **Approve** the text amendment to amend regulations related to exterior building materials.

Chapter 530 related to the Zoning Code: *Site Plan Review*

ATTACHMENTS

1. Ordinance amending Chapter 530 related to the Zoning Code: Site Plan Review

Exterior Building Material Classification

The material classification is intended to provide a basis for regulating the implementation of exterior building materials on projects subject to Site Plan Review. These generally include residential projects with more than 3 units, commercial, mixed use, and industrial projects. Materials are assigned to each class based on their design quality, application, durability, and performance in development applications. The classification is applied with consideration of scale and building type.

Classification

Class I	Class II	Class III
<ul style="list-style-type: none"> ○ Brick Masonry ○ Stone Masonry ○ Cast Stone Masonry ○ Precast Concrete, Architectural Finish ○ Concrete, Architectural Finish ○ Glass Wall System ○ Metal Panel 	<ul style="list-style-type: none"> ○ Stucco ○ Fiber Cement Lap Siding ○ Fiber Cement Panel 	<ul style="list-style-type: none"> ○ Wood ○ Manufactured Stone ○ CMU, Architectural Finish ○ CMU, Plain Face Finish** ○ Concrete, Unfinished** ○ Wood Composite Lap Siding

○ Materials not allowed: EIFS, Vinyl

○ All materials shall be installed to manufacturers specifications

**Unfinished CMU and unfinished concrete shall not be used on any elevation facing a public street, sidewalk, or on-site parking lot.

Application

In general, exterior materials will be regulated based on building type and use, and in the case of residential projects, building scale. Buildings should have no more than 3 materials per elevation and should incorporate a clear hierarchy of material choices, with one material as the primary exterior building material and secondary materials as subordinate. Projects must incorporate at least one Class I material.

All projects have the ability to seek *alternative compliance* to the material classification. Alternative compliance is granted when strict adherence to the requirements of the ordinance is not practical because of location or conditions and the proposed alternative is consistent with the intent of the ordinance. Alternative compliance may include a material that is not classified but is demonstrated to be substantially similar to a classified material. Alternative compliance does not require a variance but is granted at the discretion of the Planning Commission.

Building Type	Class I	Class II & III*
Residential / Mixed Use (4-150 units)	30-100%	0-70%
Residential / Mixed Use (151+ units)	60-100%	0-40%
Commercial / Industrial / Institutional	70-100%	0-30%

*Class III materials shall not constitute more than 30% of any building elevation.

ORDINANCE

By Schroeder and Bender

Amending Title 20, Chapter 530 of the Minneapolis Code of Ordinances relating to Zoning Code: Site Plan Review.

The City Council of the City of Minneapolis do ordain as follows:

Section 1. That Chapter 530 of the Minneapolis Code of Ordinances be amended by adding thereto a new Section 530.125 to read as follows:

530.125. Exterior materials. (a) In general. Exterior materials shall be durable. The design of buildings or additions subject to site plan review shall be reviewed using the following exterior material classification system:

(1) Class I.

a. Brick Masonry.

b. Stone Masonry.

c. Cast Stone Masonry.

d. Precast Concrete, Architectural Finish.

e. Concrete, Architectural Finish.

f. Glass wall system.

g. Metal Panel.

(2) Class II.

a. Stucco.

b. Fiber Cement Panel.

c. Fiber Cement Lap Siding.

(3) Class III.

a. Concrete Masonry Unit, Architectural Finish.

b. Concrete Masonry Unit, Unfinished.*

c. Precast Concrete, Unfinished.*

d. Concrete, Unfinished.*

e. Manufactured Stone.

f. Wood.

g. Wood Composite Lap Siding.

*Unfinished concrete, precast concrete, or concrete masonry units shall not be used on any primary building elevation facing a public street, sidewalk, or on-site parking lot.

(b) Exterior material standards. Each elevation of a building shall meet the following exterior material standards:

(1) The overall palette of materials should not be overly complex. Each elevation shall be limited to no more than three (3) materials. The material for trim, fascia, mechanical penetrations, and other similar features may be excluded from this material limitation.

(2) Exterior material classifications shall be allowed on each elevation at the percentages in Table 530-2 Exterior Building Material Percentages. Material percentage calculations are based on the elevation area for each individual elevation excluding window or door area.

Table 530-2 Exterior Building Material Percentages

Building Type	Class I	Class II & III*
<u>Residential/Mixed-Use (4-150 units)</u>	<u>30-100%</u>	<u>0-70%</u>
<u>Residential/Mixed-Use (151 + units)</u>	<u>60-100%</u>	<u>0-40%</u>
<u>Commercial/Industrial/Institutional</u>	<u>70-100%</u>	<u>0-30%</u>

*Class III materials shall not constitute more than thirty (30) percent of any building elevation.

(3) Material transitions shall correspond to building massing changes, recesses, and projections and shall be articulated through architectural detailing such as joints, trim, moulding, or cornices.

(4) The exterior materials and appearance of the rear and side elevations of any building shall be similar to and compatible with the front of the building.

(5) Mechanical penetrations shall be detailed in such a way as to minimize the effects of moisture, exhaust or other mechanical discharge on the building façade.

(6) Materials shall be installed to manufacturer's specifications.

(c) Exceptions. The city planning commission or zoning administrator may approve alternatives to these requirements, subject to section 530.80, provided that the durability of the materials is ensured and the design is consistent with the intent of this ordinance.

Section 2. That Section 530.280 of the above-entitled ordinance be amended to read as follows:

530.280. - Design standards. New single-, two-, and three-family dwellings shall comply with the applicable regulations of this zoning ordinance, including but not limited to the standards of Chapter 535, Regulations of General Applicability, related to front entrance, window area, and walkway requirements, and limitations on attached garages facing the front lot line. In addition, the zoning administrator shall ensure that such uses obtain a minimum of seventeen (17) points from ~~Table 530-2~~ Table 530-3, Standards for Single-, Two-, and Three-Family Dwellings.

~~Table 530-2~~ Table 530-3 Standards for Single-, Two-, and Three-Family Dwellings

Points	Design Standard
6	The exterior building materials are masonry, brick, stone, stucco, wood, cement-based siding, and/or glass
4	The height of the structure is within one-half (½) story of the predominant height of residential buildings within one hundred (100) feet of the site
4	The total diameter of trees retained or planted equals not less than three (3) inches per one thousand (1,000) square feet of total lot area, or fraction thereof. The diameter of each tree shall be at least two and one-half (2.5) inches. Tree diameter shall be measured at four and one-half (4.5) feet above grade.
3	Not less than twenty (20) percent of the walls on each floor that face a public street, not including walls on half stories, are windows
3	Not less than one (1) off-street parking space per dwelling unit is provided in an enclosed structure that is detached from the principal structure and is located entirely in the rear forty (40) feet or twenty (20) percent of the lot, whichever is greater, and the accessory structure is not less than twenty (20) feet from any habitable portion of the principal structure
3	The structure includes a basement as defined by the building code
2	Not less than ten (10) percent of the walls on each floor that face a rear or interior side lot line, not including walls on half stories, are windows
1	The development qualifies for and, following construction, provides proof of receipt of a City of Minneapolis Stormwater Quality Credit
1	The structure includes an open, covered front porch of at least seventy (70) square feet that is not enclosed with windows, screens, or walls, provided there is at least one (1) existing open front porch within one hundred (100) feet of the site. The porch may include guardrails not more than three (3) feet in height and not more than fifty (50) percent opaque. The finish of the porch shall match the finish of the dwelling or the trim on the dwelling. For the purpose of this section, raw or unfinished lumber shall not be permitted on an open front porch.

Section 3. That Section 530.290 of the above-entitled ordinance be amended to read as follows:

530.290. Accessibility. Structures that provide certain accessible features shall be awarded points from ~~Table 530-2~~ Table 530-3, Standards for Single-, Two-, and Three-Family Dwellings, equivalent to providing twenty (20) percent window area facing public streets, off-street parking in an enclosed structure that is detached from the principal structure, and a basement, without having to provide these features. Such structures shall obtain the remainder of the required minimum point total from the remaining categories. For the purpose of this section, a dwelling unit shall include, at a minimum, a ground-level accessible entrance, interior doorways not less than three (3) feet in width, and a ground-level restroom.

Section 4. That Section 530.310 of the above-entitled ordinance be amended to read as follows:

530.310. Alternative compliance. (a) In general. Notwithstanding any other provision to the contrary, the zoning administrator may grant alternatives to the standards of this article by allowing a new structure to obtain fewer than the minimum number of points from ~~Table 530-2~~ Table 530-3, Single-, Two-, and Three-Family Dwellings, upon finding each of the following:

(1) The structure is consistent with the predominant scale of existing residential structures in the same zoning district in the immediate area. In comparing the scale of the proposed structure to existing structures, the zoning administrator shall consider floor area, building height, façade width, and consistency with an established pattern of front, side, and rear yards in the vicinity.

(2) The structure achieves at least one (1) of the following:

a. The design incorporates traditional features and proportions found in the immediate area, which may include but shall not be limited to an examination of features such as windows, doors, roof lines, trim, gables, dormers, porches, or entry canopies; or

b. The design demonstrates exceptional creativity and incorporates high-quality, durable exterior materials.

(3) On sloped sites, the design responds to the topography of the site by following existing patterns in the vicinity and minimizing the apparent mass of the structure when viewed from lower elevations.

(4) The proposal is consistent with the applicable urban design policies of the comprehensive plan.

(b) Notification. In conducting the review of requests for alternative compliance from this article, the zoning administrator shall mail notice of the request to property owners within one hundred (100) feet of the property and shall allow a public comment period of not less than ten (10) calendar days between the date of notification and the final decision. The zoning administrator's decision may be appealed in accordance with the standards of Chapter 525, Administration and Enforcement.