



FLAMINGO CROSSINGS VILLAGE

CASE STUDY

CMCE LIGHTNING SUPPRESSION SYSTEM

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Protecting One of the Nation's Largest Student Housing Communities with CMCE Lightning Suppression

American Campus Community - Flamingo Crossings Village

[American Campus Communities](#) (ACC) is the **nation's largest developer, owner, and manager of high-quality student housing communities**. Serving colleges and universities across the United States, ACC specializes in creating living environments that support student success through modern accommodations, amenities, and community-focused experiences.

One of ACC's premier developments is [Flamingo Crossings Village](#), a large-scale student housing community located adjacent to **Walt Disney World® Resort in Winter Garden, Florida**. The property serves participants in Disney's College Program and features extensive residential buildings, community spaces, infrastructure, and support facilities across a sprawling campus.

Given Central Florida's high frequency of thunderstorms and lightning activity, protecting residents, building systems, and critical infrastructure from lightning-related risks was a key consideration. ACC sought a proactive solution designed to eliminate the probability of lightning strikes across the property while supporting operational continuity for thousands of residents.

Project Overview

Located in one of the most lightning-prone regions in the United States, Flamingo Crossings Village faces frequent thunderstorms throughout the year. The property's size, resident population, and extensive infrastructure create a significant exposure to lightning-related risks.

For a residential community of this scale, lightning can impact far more than buildings alone. Direct and indirect lightning events can affect electrical systems, communications infrastructure, security systems, HVAC equipment, internet connectivity, and other critical operational assets that support daily resident life.

American Campus Communities sought a solution that would:

- Protect residential buildings and community infrastructure
- Reduce exposure to lightning-related damage
- Enhance protection for critical building systems
- Support operational continuity for residents
- Provide broad-area coverage across the property
- Align with long-term asset protection strategies

Traditional lightning protection systems are designed to manage lightning after a strike occurs. ACC wanted a more proactive approach focused on reducing the atmospheric conditions that contribute to lightning attachment.

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The Challenge

Flamingo Crossings Village consists of large East and West residential campuses covering millions of square feet. Protecting such an expansive property requires a solution capable of providing broad-area coverage while integrating seamlessly into an active residential environment.

The challenge was to implement a lightning protection strategy that could help safeguard residents, facilities, and infrastructure across both housing communities without disrupting daily operations.

The Solution

To provide comprehensive protection across the property, six CMCE-120 Lightning Suppressors were installed throughout the Flamingo Crossings Village campus.

The six-unit installation was designed to protect approximately 3,000,000 square feet spanning both the East and West housing communities.

Unlike traditional systems that focus on intercepting lightning strikes, the CMCE Lightning Suppression System is engineered to address the root cause of lightning attachment by balancing atmospheric electrical charge and reducing the conditions necessary for strike formation.

The installation was designed to:

- Balance atmospheric electrical charge
- Eliminate upward streamer formation
- Minimize conditions that contribute to lightning strikes
- Protect residential infrastructure and building systems
- Provide broad-area coverage across both housing communities

By proactively reducing lightning strike probability within the protected zone, the system helps support the long-term resilience of the property and its critical infrastructure.

Project Results & Benefits

Following the installation of **six CMCE-120 Lightning Suppressors**, Flamingo Crossings Village benefits from an expanded layer of lightning prevention across approximately 3 million square feet of residential property.

The project provides broad-area protection designed to support resident safety, infrastructure resilience, and operational continuity.

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Community-Focused Protection

The installation was strategically planned to maximize protection across the East and West housing communities while maintaining the property's appearance and functionality.

Key benefits include:

- Broad-area protection across approximately 3,000,000 square feet
- Enhanced protection for residential buildings and common areas
- Reduced exposure to lightning-related electrical disturbances
- Additional protection for communications and network infrastructure
- Improved resilience for HVAC and mechanical systems
- Support for uninterrupted community operations

Risk Mitigation

Operational Protection

- Reduced risk of lightning-related system disruptions
- Enhanced protection of electrical and mechanical infrastructure
- Improved resilience of communications and security systems
- Reduced potential for costly downtime and repairs
- Additional protection for resident services and amenities

Asset Protection

- Protection for high-value residential infrastructure
- Reduced exposure to lightning-related equipment damage
- Supports long-term property management objectives
- Helps preserve operational continuity across both housing communities

Strategic Value

- Demonstrates proactive risk management
- Supports infrastructure resilience initiatives
- Enhances protection for one of the nation's largest student housing communities
- Provides broad-area protection across East and West residential campuses

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Why It Matters

Student housing communities operate around the clock and depend on reliable infrastructure to support thousands of residents.

At a property as large as Flamingo Crossings Village, even a single lightning event can impact critical systems that residents rely on every day. Protecting those systems requires a proactive approach that goes beyond traditional strike interception.

By implementing six CMCE-120 Lightning Suppressors across approximately 3 million square feet, American Campus Communities has invested in a modern lightning risk mitigation strategy designed to help protect residents, infrastructure, and property assets while supporting long-term operational resilience.

Key Takeaway

Large residential communities require more than conventional lightning protection. They require proactive solutions designed to reduce lightning risk across extensive properties while supporting resident safety, operational continuity, and long-term asset protection.

By implementing six CMCE-120 Lightning Suppressors at Flamingo Crossings Village, American Campus Communities has enhanced protection across both East and West housing communities, helping safeguard approximately 3,000,000 square feet of critical residential infrastructure.

Project Summary

Facility: Flamingo Crossings Village

Owner: American Campus Communities

Location: Winter Garden, Florida

Property Type: Student Housing Community

Resident Community: Disney College Program Housing

Challenge: Lightning-related risk across a large-scale residential property and supporting infrastructure

Solution: Installation of six CMCE-120 Lightning Suppressors

Coverage Area: Approximately 3,000,000 square feet

Protected Areas: East and West Housing Communities

Objective: Prevent lightning strikes over the property while supporting resident safety, infrastructure protection, and operational resilience.