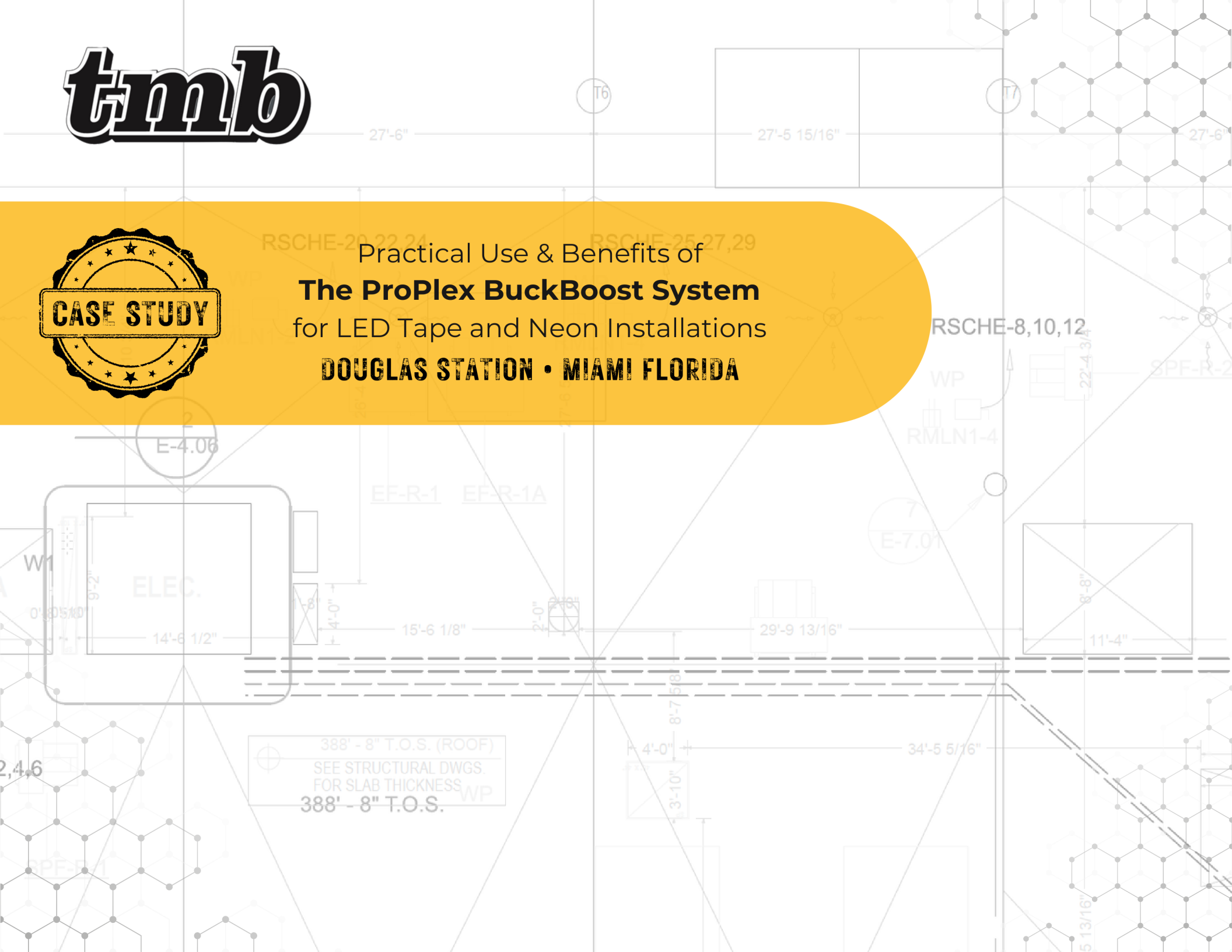




Practical Use & Benefits of
The ProPlex BuckBoost System
for LED Tape and Neon Installations
DOUGLAS STATION • MIAMI FLORIDA



DESIGN

Design Intent

Douglas Station stands as an expansive mixed-use development project spanning 5.57 acres in the vibrant heart of a Miami urban neighborhood. Orchestrated by architect firm Arquitectonica, the undertaking encompasses a residential tower of 404,000 SF, housing 421 units averaging 936 SF. Additional highlights entail 13,000 SF of retail space on the ground floor and sprawling open public plaza areas measuring 25,000 SF.

The lighting concept for the exterior of the apartment building, named "Cascade", sought to integrate abstract lines, surmounting intricate issues like the absence of external access and the challenge of illuminating an extensively exposed, rather nondescript surface. John DiDomenico chose FloppyFlex LED Neon from the onset, stating, "floppy flex was a no brainer". The LED Neon led the way on the project from concept to install, performing as desired every step of the way. The results are stunning, day and night.

In order to power the FloppyFlex, there were design challenges to overcome. The absence of room for sizable cables and equipment presented a voltage drop concern across the vast building facade. Additionally, the distance between drivers and the multiple LED fixtures proved excessive, without concealment for drivers, power supplies, or routing for mains power and data cable. The design team discovered the optimal answer to these intricate design obstacles through TMB's BuckBoost System, leading to substantial cost savings and streamlined installation processes.

Skyline Arts LLC

Headquartered in Delray Beach, Florida, Skyline Arts emerges as a prominent provider of Entertainment and Architectural Lighting Solutions. Their pivotal contribution as a vital collaborator significantly influenced the design and execution of this remarkable architectural milestone. John DiDomenico, Lead Designer and Managing Partner, enthusiastically reported, "BuckBoost is an amazing product that saved time and significant expense. With its very simple setup and flawless operation, overall BuckBoost is a game changer in the Architectural Low Voltage lighting space."

photo: Golden Dusk Photography



Cascade at Douglas Station



CONTROL

BuckBoost

SESCO, TMB's Southeast Representative, introduced Skyline Arts to the concept of utilizing the BuckBoost system. Originally, as the architectural vision aimed to extend the 24v power supply to the exterior, this undertaking grappled with the vexing issue of voltage drop. RGBW neon introduced further complexities with separate color and ground wires, creating a formidable power challenge, coupled with the demand of discreetly positioning necessary components.

To circumvent these hurdles, the initial plan involved deploying multiple sets of substantial, burdensome 6 AWG wiring from the control room to each of the specified fixtures over long distances back to drivers and PSU's stationed in the 6th Floor Electrical Room with the Pharos LPC controller.

The introduction of the BuckBoost system marked a turning point, saving 30,000 feet (5.68 miles) of heavy, expensive cable and all related labor. Conversely, specialized ProPlex BuckBoost Cable spanned a more manageable 5000 feet, offering a more elegant and manageable solution. DiDimenco added, "I can't express how happy we were that they invented Buckboost. It really needed to be done. Another project where we did not use BuckBoost was a total nightmare. Pulling all that heavy wire was very difficult."

The brilliance of the BuckBoost system lies in its ability to employ extremely thin cables, akin to the diameter of a standard pencil, all while eliminating the need for intrusive equipment near the fixtures. This innovation resulted in a remarkable reduction in both cable and installation expenses, slashing costs from \$250K to \$50K. Beyond just achieving substantial financial savings, this innovation bestowed the design team with newfound artistic latitude to manifest their vision. Consequently, Cascade at Douglas Station took the lead as the pioneering project to adopt the acclaimed BuckBoost system.

Pharos + Lumentender

At the helm of controls is the Pharos LPC, an award-winning, all-in-one control solution, paired with Lumentender, a cross-platform, cloud-based solution for the scheduling and control of commercial-scale, single or multi-site lighting systems, which will be valuable when the developer builds the next two towers and installs similar Floppy Flex systems. The UI features a unique Graphical User Interface (GUI) which displays Images and Videos for scene selection, and enables the end user to create custom scenes.



BUCKBOOST

The groundbreaking, patent-pending BuckBoost system, a key innovation, streamlined both power and data, coursing through a compact power/data cable to discreet BuckBoxes strategically located near each fixture. This astute arrangement served to ensure not only signal and power stability but also reduced installation time dramatically, often to just one hour per fixture. Proprietary technology within the BuckBoost System facilitated the seamless transmission of power and data from centralized BoostBoxes to individual BuckBoxes distributed across multiple floors, further enhancing the efficiency of the setup.

The BuckBoost system emerged as an exceptional solution that transcended the challenges associated with traditional architectural low-voltage lighting. It not only saved valuable time and resources but also offered an effortless and reliable operation. In essence, BuckBoost stands as a transformative force within the realm of architectural lighting, underscoring its pivotal role in the success of Douglas Station.

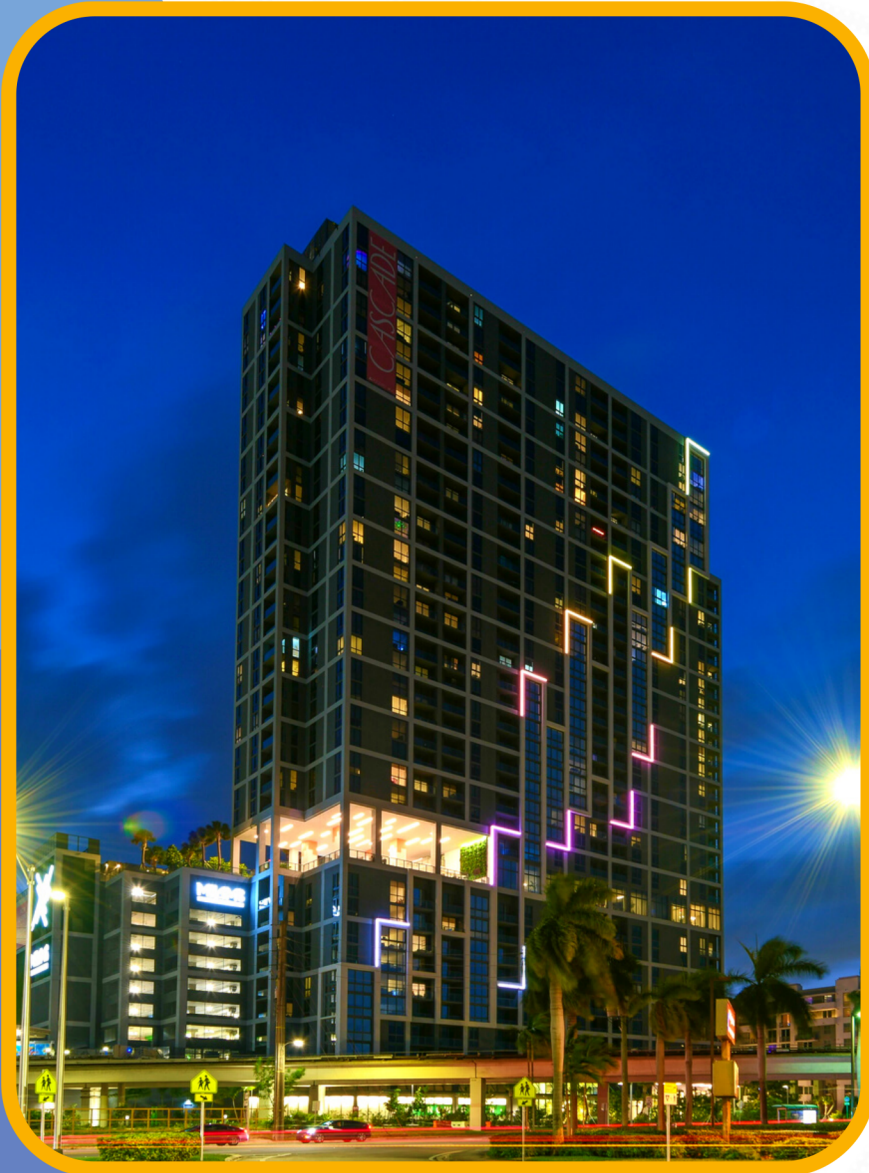


photo: Golden Dusk Photography

LINK TOWER 2								3/17/2021
CASCADE ELECTRICAL BOX INSTALLATIONS								
LED-CON	# OF BOXES	FLOOR #	FROM COLUMN	TO ROOM/FLOOR	DISTANCE in FT	# 1" conduit	TOTALS	BOX LOCATION
1	1	6	T4/T5	ELECTRICAL / 6TH	81	2	162	OUTSIDE CASCADE
2	1	8	T2	IDF / 7TH	147	3	441	INSIDE CASCADE
3	1	12	T4/T5	ELECTRICAL / 12TH	92	3	276	INSIDE CASCADE
4	1	12	T5/T6	ELECTRICAL / 12TH	71	3	213	INSIDE CASCADE
5	1	14	T7	ELECTRICAL / 13TH	121	3	363	INSIDE CASCADE
6	1	18	T4/T5	ELECTRICAL / 18TH	78	3	234	INSIDE CASCADE
7	1	18	T7/T8	ELECTRICAL / 18TH	133	3	399	INSIDE CASCADE
8	1	24	T5/T6	ELECTRICAL / 24TH	81	3	243	OUTSIDE CASCADE
9	1	24	T8	ELECTRICAL / 24TH	149	3	447	OUTSIDE CASCADE
10	1	28	T6/T7	IDF / 28TH	120	3	360	OUTSIDE CASCADE
11	1	28	T7/T8	IDF / 28TH	134	3	402	OUTSIDE CASCADE
12	1	28	T8/T9	IDF / 28TH	166	3	498	OUTSIDE CASCADE
13	1	30	UNIT B5 NW	ELECTRICAL / 30TH	161	3	483	INSIDE CASCADE
14	1	34	UNIT A4 NORTH	IDF / 34TH	148	3	444	OUTSIDE CASCADE
15	1	ROOF	T8/T9	ELECTRICAL / ROOF	166	3	498	TBD
16	1	ROOF	UNITA4/A5 NORTH	ELECTRICAL / ROOF	132	3	396	TBD
TOTALS =							5859	

GEAR LIST

Lighting

- FloppyFlex Silicone Large 270° STS Bending, RGBW
 - Factory Molded, Custom Lengths
- FloppyFlex 270° IP68 Seamless Power Feed
- FloppyFlex Self-Locking Anodized Aluminum Profile

Power Data System

- ProPlex FloppyDrive BoostBox 2 DIN
- ProPlex FloppyDrive BuckBox 1 Universal 24V IP67

Controls

- Pharos LPC
- Lumentender

Cable

- 5,500' PCCCT ProPlex #14/2, #22/2
- 2,000' PC244T ProPlex, 24 AWG

Partners

TMB: Lighting, Cable, Support

Lighting & Systems Design: Skyline Arts

Rep / Distribution: SESCO Lighting

Architect: Arquitectonica

Developer: Adler Group

Electrical Engineer: TLC Electrical Solutions

Structural Engineer: BJ Engineers

General Contractor: Civic Construction





TMB specializes in the distribution and resale of lighting equipment and related technologies, known for providing lighting solutions for various applications, including live events, concerts, theatrical productions, architectural lighting, and more.

TMB is an authorized value-added reseller (VAR) of several popular lighting brands and products, including FloppyFlex, ProPlex, and Solaris. As an architectural value-added reseller, TMB provides lighting solutions for architectural projects such as buildings, installations, and other design applications.

For the most accurate and up-to-date information, visit the official website or contact TMB directly.

[LEARN MORE](#)

TMBARCHITECTURAL.COM

