



Artafex

Linear

Design
Application
guide

dmf



A new approach to linear lighting

Linear Lighting has become a critical design element to providing premium lighting experiences in the luxury residential market. The additional layers of lighting provided by linear solutions help to highlight architectural details and provide additional lighting layers that add sophistication and beauty to a space.



Traditional linear solutions that are available for the luxury residential market have challenges around reliability, performance and deployment. Artafex Linear leverages DMF's strength in engineering to provide a modular system that addresses some of the pain points of these existing solutions.



**Easy
Ordering**



**Reliable &
Serviceable**



**Effortless
Installation**



High Performance
Color Matching & Dot-Free Illumination

Common linear *applications*



Under-cabinet *lighting*

Adds an additional layer of task lighting to kitchens, bringing light closer to counter tops and work surfaces. Linear lighting allows for a continuous & even light that covers the entire surface.



Millwork *and shelving*

Millwork and shelving - linear is particularly suited to recessing into the slim profile of millwork, and can create both functional lighting, such as in closets, or additional layers of ambient light in decorative display applications.



Cove *lighting*

Cove Lighting - helps to add dimension to a room and supplements other lighting layers. By adding light to vertical surfaces, cove lighting can also help a room to appear more spacious, and also help to light artwork placed on walls.



Toe Kick *lighting*

Toe Kick - can create visual intrigue and also highlight flooring finishes. From a functional perspective, toe kick lighting can also make for great night lights, adding just enough low level light to aid in navigation.

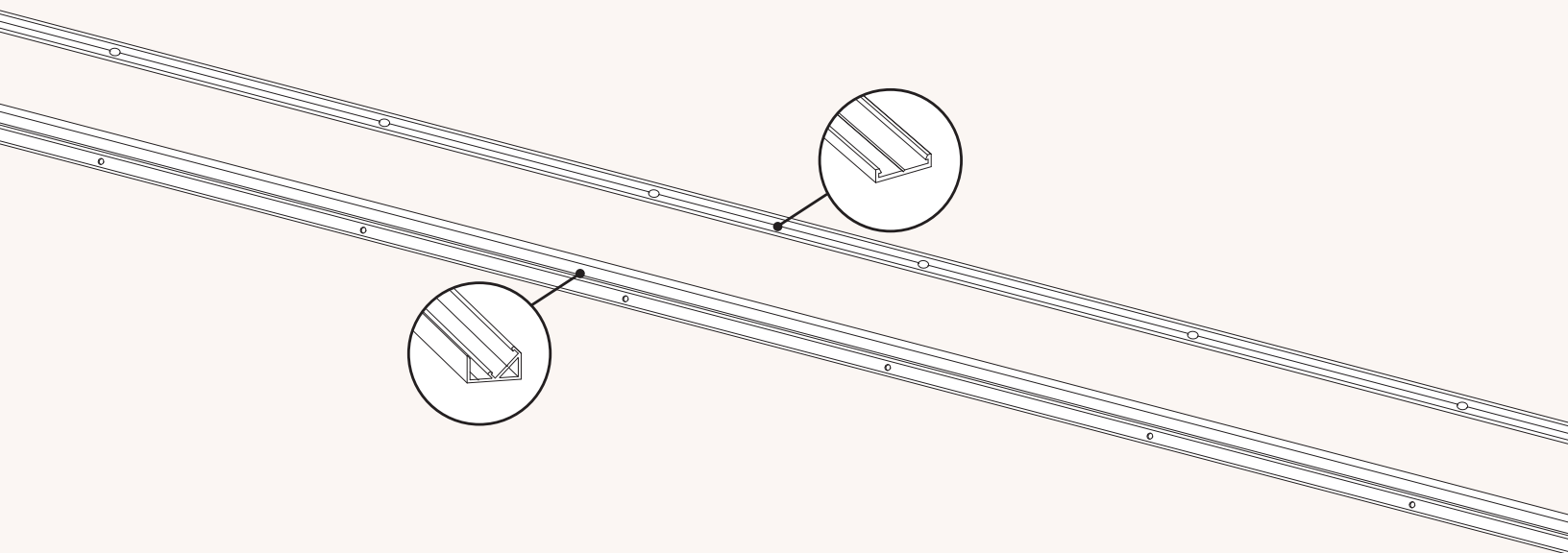
Installation *considerations*

Choosing between flat or 45° mounting track:

Specific applications may dictate either a flat or 45° mounting track, and others may be flexible. Consider the following:

- The beam angle of Artafex Linear is 120°. Consider how a flat or 45° track will change the direction of this distribution
- Applications such as vertical millwork lighting or under cabinet lighting may work well with 45° mounting tracks as they can help direct more of the light towards objects.
- The flat mounting track maintains an overall smaller profile at .5" x .5", vs. the .75" x .75" of the 45° track.

The sample detail drawings section contains some examples of different applications with each mounting track.



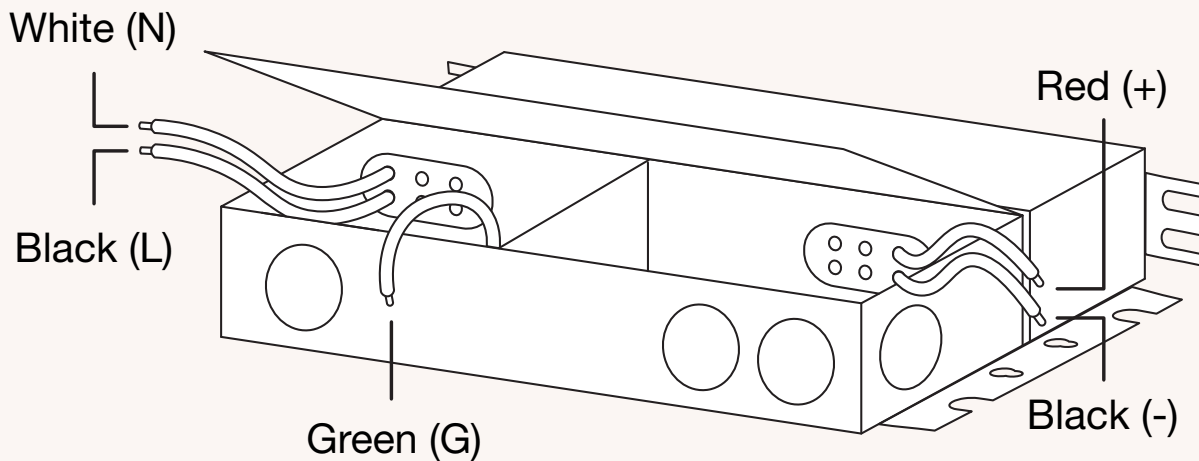
Locating drivers and wire home runs

Artafex Linear drivers should be housed in a dry, accessible and ventilated location. Be sure to follow all applicable code and regulations when deciding on driver locations and wiring.

- Wiring - use appropriate 16/2 or 18/2 wire to connect the driver and fixtures
 - 18/2 Max Home Run - 75'
 - 16/2 Max Home Run - 200'
- Plenum rated wire may be required when running cable through ceilings or wall cavities



When using multiple drivers to feed one dimming zone (eg. a large ceiling cove) - it is recommended to keep home run lengths the same to maintain dimming consistency.



Fixture Run Lengths:

Consider the following guidelines when planning linear fixture runs:

- One 96w Artafex Linear driver can support up to 20' of illuminated fixture segments.
- Connect a maximum of two (2) starter pieces to a single driver.
- It is recommended to connect a minimum of 3' of fixture segments to each driver for optimal dimming performance.

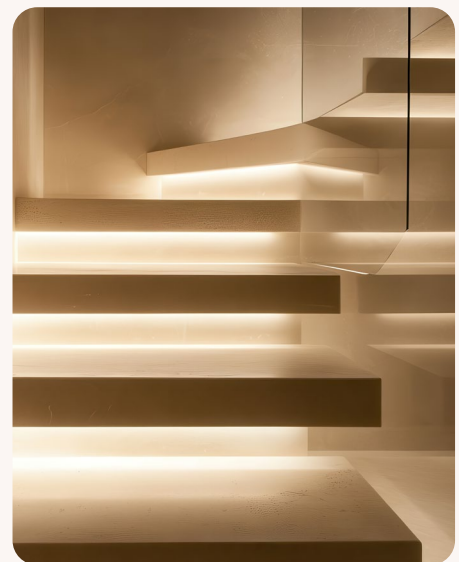
Minimal Applications

Installations in minimal or limited spaces may require special attention and planning for wire runs and jumpers. For example, minimal profile ceiling cove may need space to hide jumper cables to avoid shadowing. In a situation like this, drilling a small hole at the corner where the jumper is used can allow for excess slack to be tucked out of the way.

Wire Routing:

Advanced planning and coordination for wire home runs should be taken to ensure a seamless and clean installation. Consider the following:

- Coordinate with millworkers, carpenters & contractors to plan wire run paths and any necessary routing to conceal wiring.
- Run wire with some slack to allow for future serviceability.
- Painting wire to match finishes or matte black can help to reduce visibility and elevate the overall aesthetic.



Installation *considerations*

Artafex Linear is a first of its kind, modular approach to linear lighting, allowing for fast, reliable installation and flexibility in the field. In order to achieve the best results, keep in mind the following fixture guidelines and application notes.



Fixture Segment Compatibility

- Every fixture run must begin with a starter piece, which connects to the wiring from the driver. Connect a maximum of 2 starter pieces to one driver.
- Only a 12" segment can connect to the starter piece. 12" segments may be used at any point in the run, and may be the final segment.
- Use a maximum of (5) x 2" segments in one fixture run.
- A 1" fixture segment can only be used as the final segment in a run. 1" segments have a permanently mounted dead end cover and may only mate with a middle connector on one side.

Determining Fixture Run Lengths

Depending on the application, the exact illuminated length of the fixture may be more or less critical. Examples of some particularly sensitive applications are:

- Cove lighting in a pure white ceiling or against more specular (reflective) finishes.
- Toe kick lighting against specular floor material (eg. marble or polished stone).

For these situations, it is recommended to plan runs in a thoughtful manner to fit the location as completely as possible.

As with all installations, mock-ups in the field or with material samples are highly encouraged to ensure that the finished installation yields the desired results.

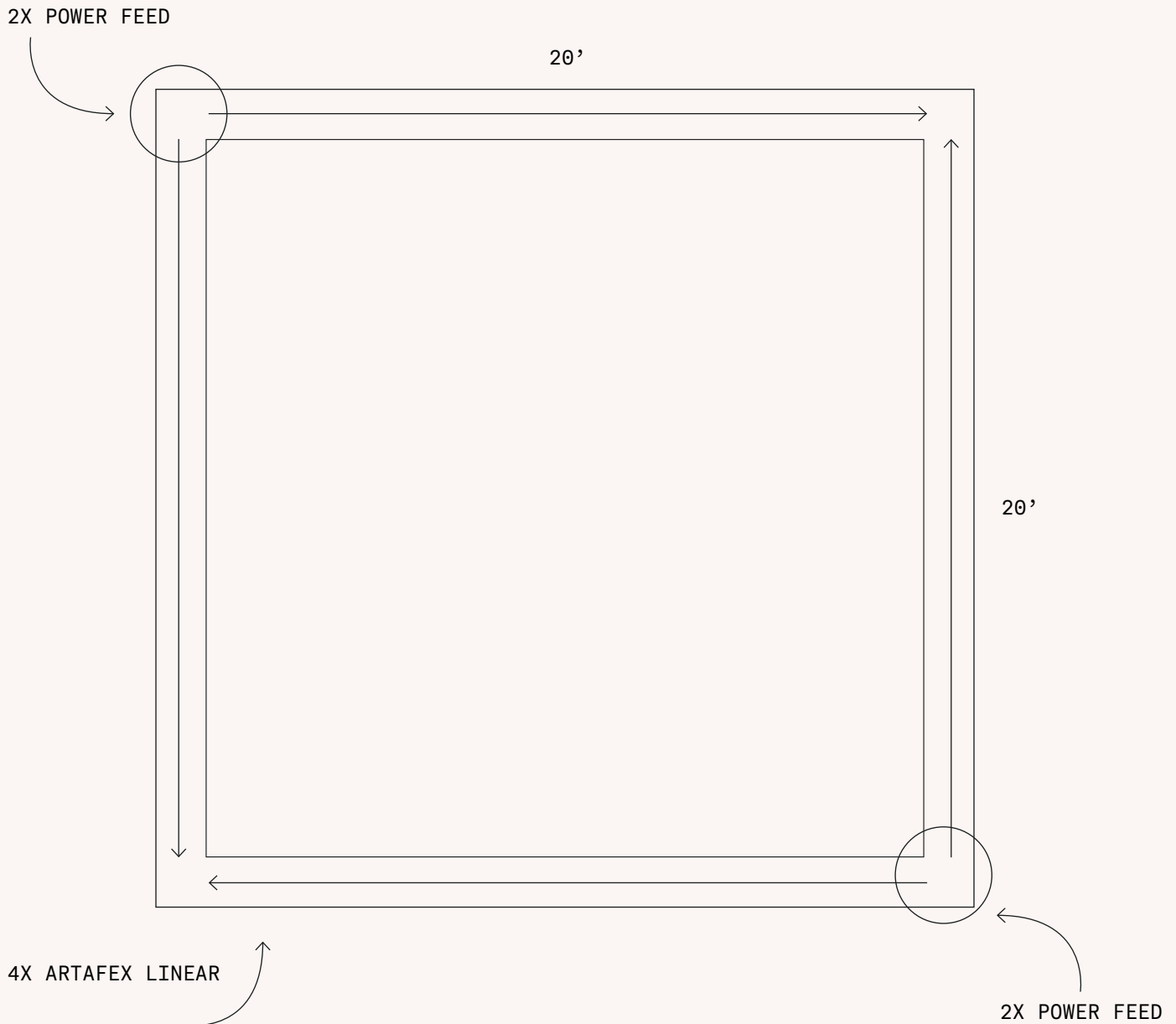
Determining Power Feed Locations

For continuous runs that exceed 20' (the maximum for a single driver), power feed locations need to be considered. The Artafex Linear fixtures work in tandem with the driver and starter piece to deliver consistent voltage across the entire run length of the fixture.

That said, certain sensitive applications may be susceptible to any slight voltage loss that might occur. For this reason, end-to-end power feeds are recommended. The example of a 20' square

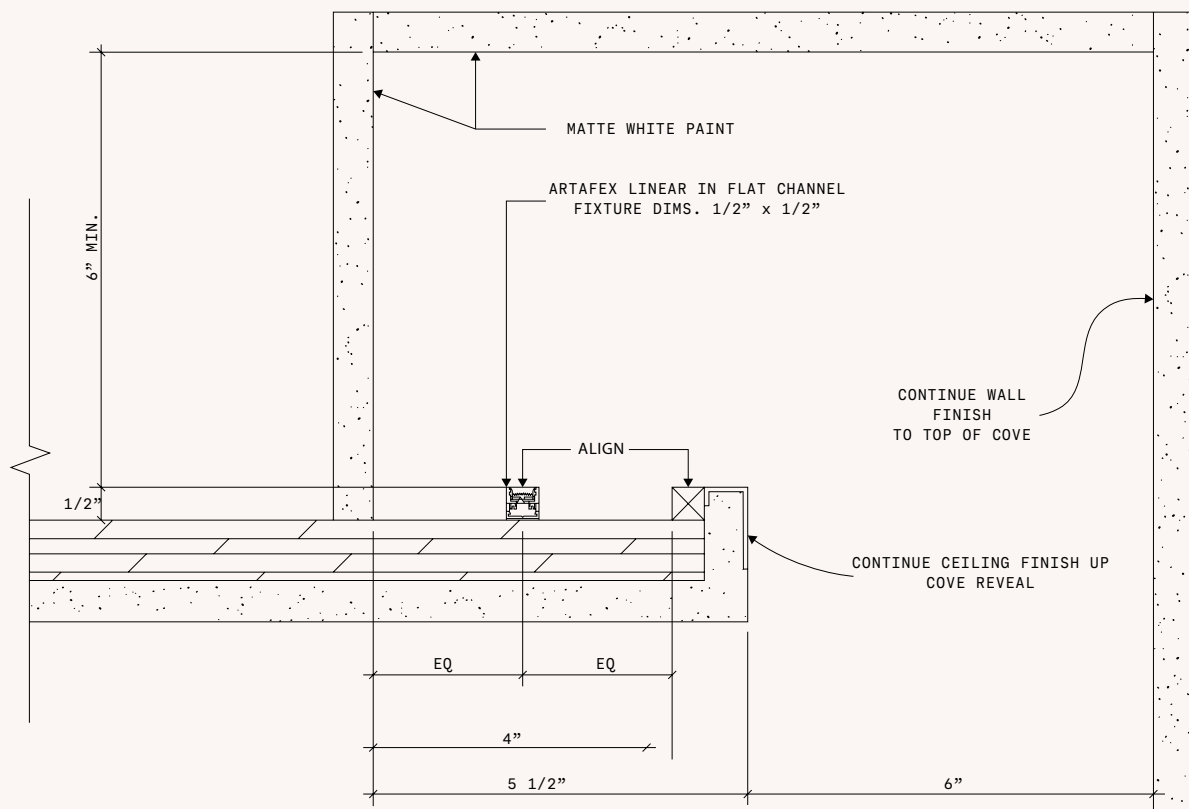
cove below illustrates how to best lay this out, using 2 pairs of power feeds, each starting in opposite corners from each other, and drivers that are located to facilitate equal length wire home runs.

This layout method will eliminate the possibility of any noticeable difference in brightness between the beginning and end of a fixture run which would otherwise be imperceptible without another fixture directly adjacent.

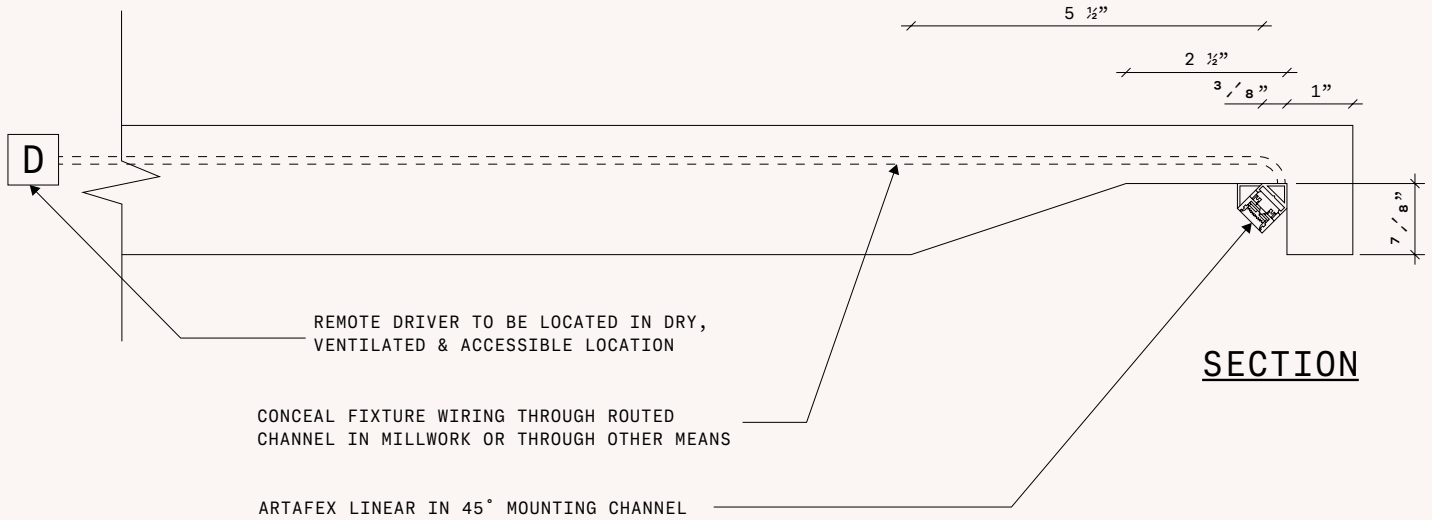


Example *installation details*

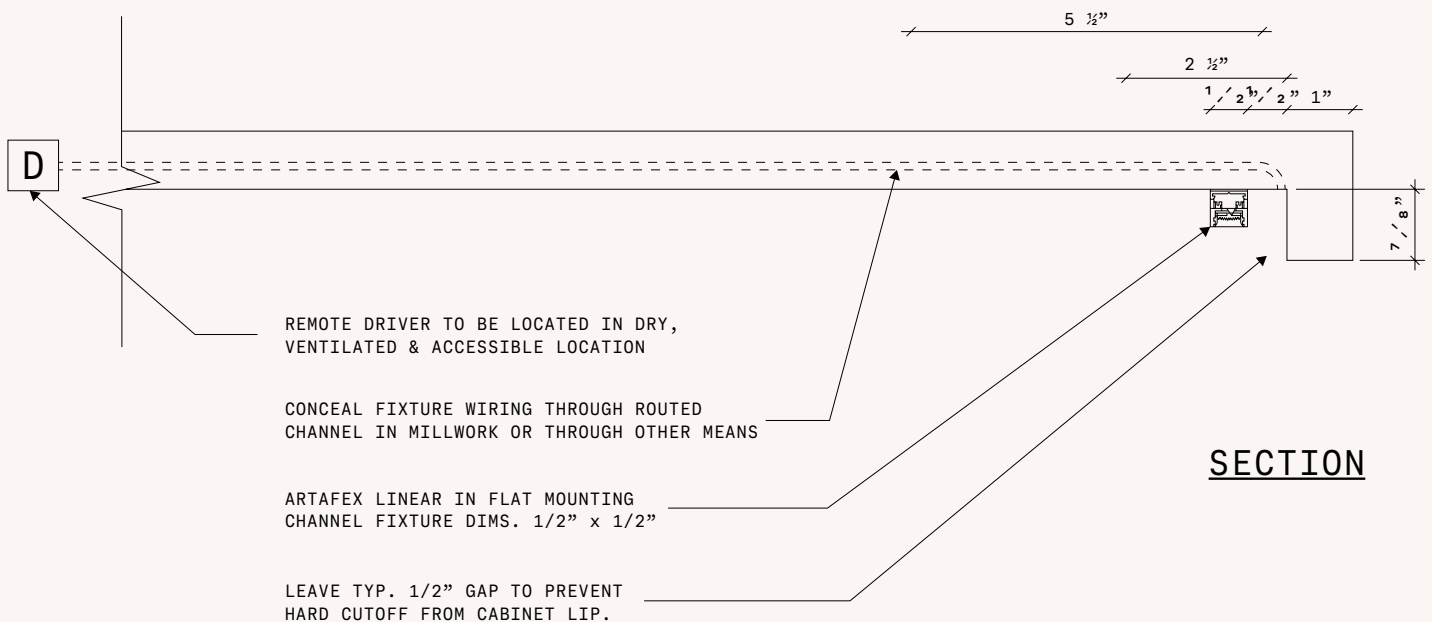
Detail Drawing - Cove



Detail Drawing - *Under-cabinet*



Detail Drawing - *Alt Under-cabinet*



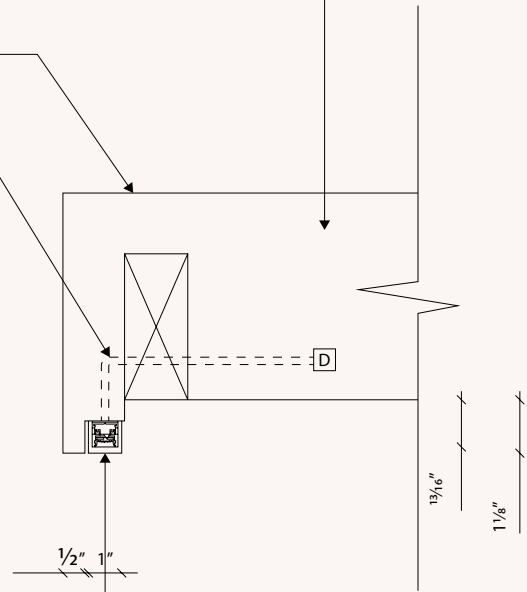
Detail Drawing - *Stair*

REMOTE DRIVER TO BE LOCATED IN DRY,
VENTILATED & ACCESSIBLE LOCATION

STAIR TREAD

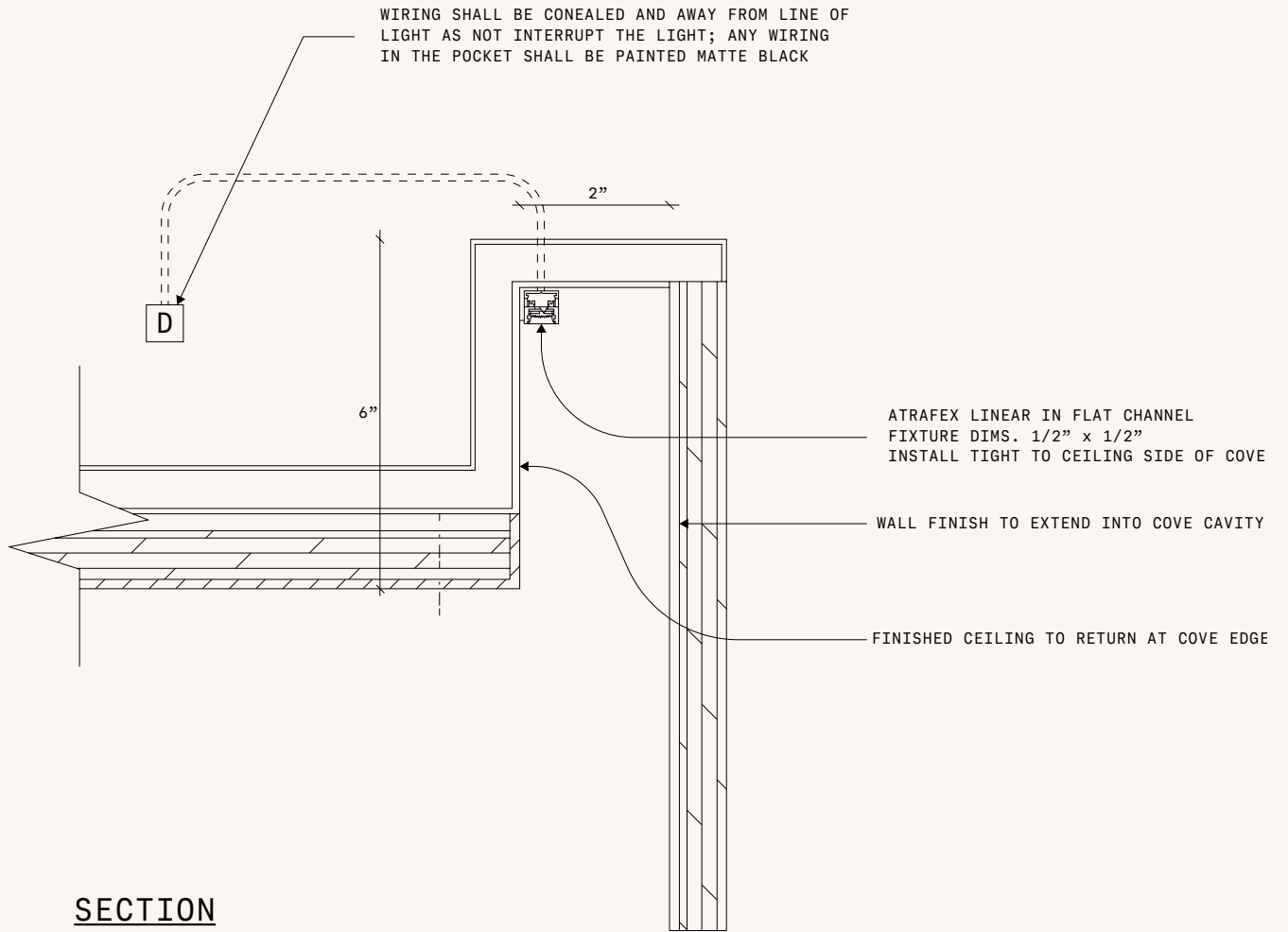
CONCEAL FIXTURE WIRING THROUGH ROUTED
CHANNEL IN MILLWORK OR THROUGH OTHER MEANS

ARTAFEX LINEAR IN FLAT MOUNTING CHANNEL
FIXTURE DIMS. 1/2" x 1/2"

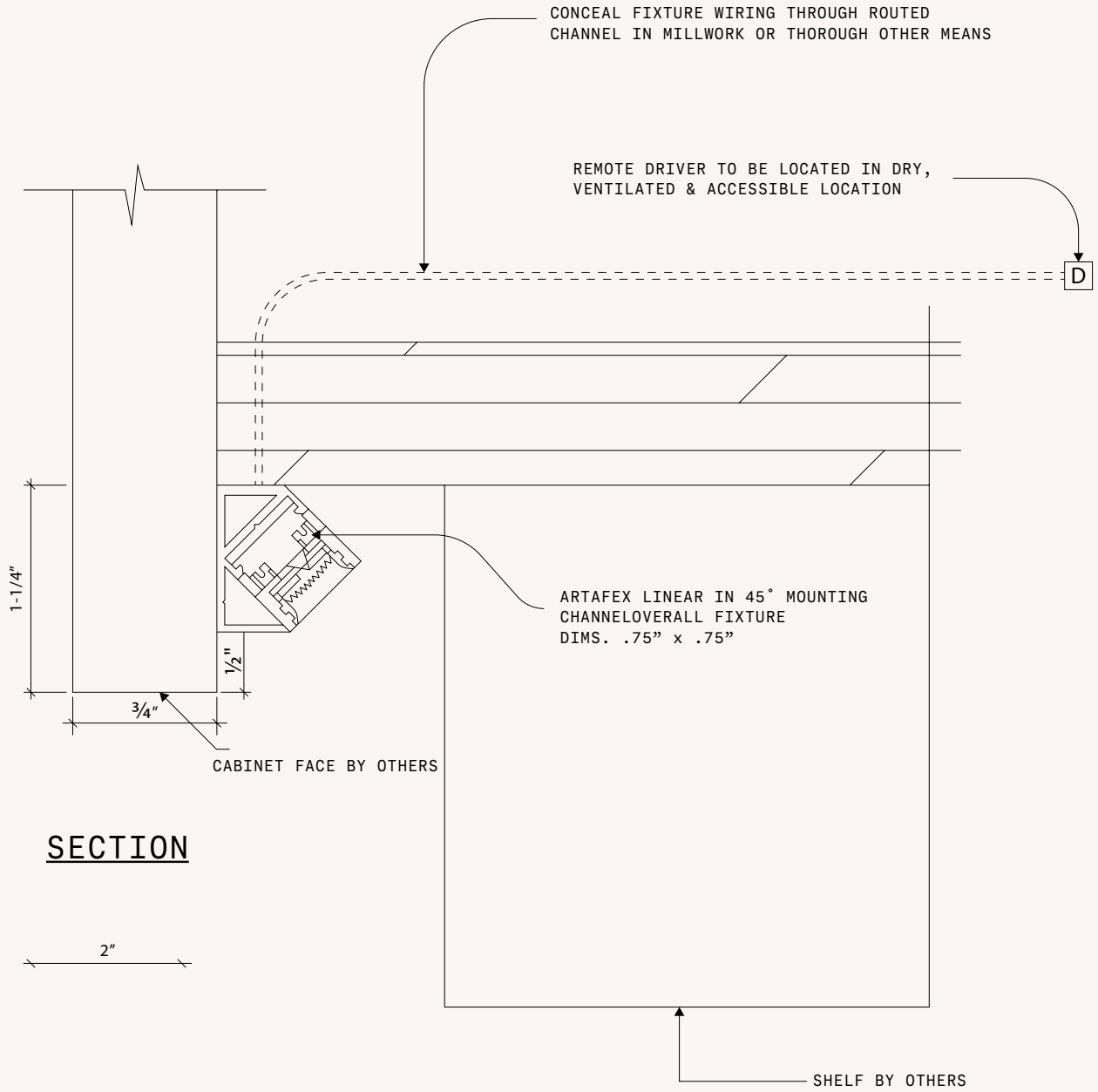


SECTION

Detail Drawing - *Graze*



Detail Drawing - *Vertical Shelf*





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