

Hands On #3

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Floor Plan



Cable Estimate

I had used a ruler and based my cable length assumptions by getting the length between certain rooms and the equipment and telecom rooms. I measured the building, and it averaged about 8 inches and based it around the 100 ft. When I got my measurements, they doubled or tripled which allowed me to go about using either 25ft, 50ft, or 75ft cables because they were about a quarter, half, and three quarters. Then to find out how much cable to go with between the floors, I used the 3 meters and found out it was around 10 feet and based how many I would need for that. To get the amount I had picked for the longer cables, I ran lines throughout the hallways and in the ceiling towards the center rooms and multiplied how many I needed based on how far away each area was and used colors to determine which ones go to which area. After counting the amount of cable, it would round up to 8610ft total or 2624.328 m of cable.

Materials Budget

Item	Quantity	Price	Total
Short Patch Cable (1ft)(5-pack)	38	\$13.49	\$512.62
2 Port Wall Plate	185	\$7.89	\$1459.65
Patch Panel (48 Port)	6	\$69.99	\$409.86
Patch Cable (10ft) (Black Lines)	2	\$6.84	\$13.68
Patch Cable (25ft) (Blue Lines)	72	\$8.90	\$640.80
Patch Cable (50ft) (Light Green Lines)	75	\$13.90	\$1042.50
Patch Cable (75ft) (Magenta Lines)	38	\$16.90	\$642.20
Shipping and Tax		\$0	\$275.38
Total			\$4,876.81

Items Used for Calculations

- 1ft Patch cable - https://www.amazon.com/Ethernet-CableCreation-Gigabit-Network-Computer/dp/B01JO3FM7Y/ref=sxbs_pa_sp_search_thematic_bt_f_sspa?content-id=amzn1.sym.97a5b67f-5f95-4e76-8917-4d9669a5d482%3Aamzn1.sym.97a5b67f-5f95-4e76-8917-4d9669a5d482&cv_ct_cx=Network%2BPatch%2BPanel&keywords=Network%2BPatch%2BPanel&pd_rd_i=B01JO3FM7Y&pd_rd_r=3b91202a-25bb-49e9-ac2e-438323242ac7&pd_rd_w=qUGlN&pd_rd_wg=5spz3&pf_rd_p=97a5b67f-5f95-4e76-8917-4d9669a5d482&pf_rd_r=1SA935V30A505D7TZAQ0&qid=1663879929&sr=1-4-97bafd84-a21b-4eac-aafb-f1e805a45134-spons&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUeYRks0QTJQRU9KVk5YJmVuY3J5cHRlZElkPUeWOTE1MDM0M0dTNzBFRUwwNVRPWSZlbnNyeXB0ZWRBZEIkPUeWODg2NjY0MVA1MFBNOFJYVU1PVSZ3aWRnZXROYW1IPXNwX3NIYXJjaF90aGVtYXRpY19idGYmYWN0aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3Rmb2dDbGljaz10cnVI&th=1
- 10ft cable - https://www.amazon.com/Mediabridge-Ethernet-Cable-Feet-31-299-10B/dp/B006JN6PL0/ref=sr_1_9?crid=2ELV1473GF98D&keywords=cat5+patch+cable+10ft&qid=1663892132&s=pc&sprefix=cat5+patch+cable+10ft%2Ccomputers%2C58&sr=1-9
- 25ft cable – https://www.amazon.com/Ethernet-Adoreen-Network-Internet-Ties-25ft/dp/B093K2KQW8/ref=sr_1_2_sspa?crid=Z3CE828KBIBR&keywords=cat5%2Bpatch%2Bcable%2B25ft&qid=1663889497&refinements=p_n_feature_ten_browse-bin%3A23555329011&rnid=23555276011&s=pc&sprefix=cat5%2Bpatch%2Bcable%2B25ft%2Ccomputers%2C55&sr=1-2-spons&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUeZkZMVFCSjdZSjIKJmVuY3J5cHRlZElkPUeWMzU1Nzc2MU1SR0taS0hFMTJKWSZlbnNyeXB0ZWRBZEIkPUeWMTEzMjY4MkUzMVRNN1BYVVpONCZ3aWRnZXROYW1IPXNwX2F0ZiZhY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU&th=1
- 50ft cable – https://www.amazon.com/Ethernet-Adoreen-Network-Internet-Ties-25ft/dp/B093KKJMXC/ref=sr_1_2_sspa?crid=Z3CE828KBIBR&keywords=cat5%2Bpatch%2Bcable%2B25ft&qid=1663889497&refinements=p_n_feature_ten_browse-bin%3A23555329011&rnid=23555276011&s=pc&sprefix=cat5%2Bpatch%2Bcable%2B25ft%2Ccomputers%2C55&sr=1-2-spons&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUeZkZMVFCSjdZSjIKJmVuY3J5cHRlZElkPUeWMzU1Nzc2MU1SR0taS0hFMTJKWSZlbnNyeXB0ZWRBZEIkPUeWMTEzMjY4MkUzMVRNN1BYVVpONCZ3aWRnZXROYW1IPXNwX2F0ZiZhY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU&th=1

Items Cont.

- 75ft cable – https://www.amazon.com/Ethernet-Adoreen-Network-Internet-Ties-25ft/dp/B094Z4ZRXp/ref=sr_1_2_sspa?crid=Z3CE828KBIBR&keywords=cat5%2Bpatch%2Bcable%2B25ft&qid=1663889497&refinements=p_n_feature_ten_browse-bin%3A23555329011&rnid=23555276011&s=pc&srefix=cat5%2Bpatch%2Bcable%2B25ft%2Ccomputers%2C55&sr=1-2-spons&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEzRkZMVVFCSjdZSjlKJmVuY3J5cHRlZElkPUewMzU1Nzc2MU1SR0taS0hFMTJKWSZlbnNyeXB0ZW50ZWRBZElkPUewMTEzMjY4MkUzMVRNN1BYVVpONCZ3aWRnZXROYW1lPXNwX2F0ZiZhY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU&th=1
- Patch panel – https://www.amazon.com/Cable-Matters-Rackmount-Wallmount-48-Port/dp/B0072K1P8C/ref=sr_1_1_sspa?crid=1Y4ECJ3R4TCL5&keywords=network+patch+panel+48+port&qid=1663882666&srefix=Network+Patch+Panel%2Caps%2C65&sr=8-1-spons&psc=1&smid=A1AMUYA3CT6HJ&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEyUU5KRjQ1WkpUVkVLJmVuY3J5cHRlZElkPUewODI4MDg1MzM0UTIZVEJDNTNTRKVyZlbnNyeXB0ZW50ZWRBZElkPUewODQ1NDY5M0g5Q1ZMV1lXUkZNUSZ3aWRnZXROYW1lPXNwX2F0ZiZhY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU=
- 2 Port outlet – https://www.amazon.com/Sancable-Ethernet-Plate-Keystone-Female/dp/B07LGYFKYN/ref=asc_df_B07LGYFKYN/?tag=hyprod-20&linkCode=df0&hvadid=343238550635&hvpos=&hvnetw=g&hvrnd=362796639741936396&hvpone=&hvptwo=&hvqmt=&hvddev=c&hvdvcmdl=&hvlocint=&hvlocphy=9008533&hvtargid=pla-785735881335&psc=1&tag=&ref=&adgrpid=68750230963&hvpone=&hvptwo=&hvadid=343238550635&hvpos=&hvnetw=g&hvrand=362796639741936396&hvqmt=&hvddev=c&hvdvcmdl=&hvlocint=&hvlocphy=9008533&hvtargid=pla-785735881335