



RUTGERS

Office of Information
Technology

COMMUNICATIONS FACEPLATES AND CONNECTORS

T568B Compatibility

Elements of the voice and data distribution system, including cable, termination methods, and jacks, must be compatible with ANSI/TIA-568.2-D jack designation T568B.

Faceplates/Jacks

The University has defined the Wiring Plans (WP) in the table below:

Types of Wiring Plans
WP1 (1 Voice/1 Data)
WP1A (1 Voice/1 Data) - Steelcase
WP2 (1 Voice/1 Data/1 FTV)
WP2A (1 Voice/1 Data/1 FTV) - Steelcase
WP2C (1 Voice/1 Data/1 FTV) – Coiled
WP3 (1 Voice)
WP4 (2 Voice)
WP5 (1 Data)
WP5W (1 VoIP Wall Phone)
WP5AP (1 Data)
WP6 (2 Data)
WP6AP (2 Data)
WP7 (3 Data)
WP8 (4 Data)
WP9 (1 Voice/3 Data)
WP10 (1 Wall Telephone)
WP11 (1 Voice/2 Data)
WP11A (1 Voice/2 Data) - Steelcase
WP12 (2 Voice/1 Data)
WP13 (2 Voice/2 Data)
WP13A (2 Voice/2 Data) - Steelcase
WP14 (2 Voice/2 Data/1 FTV)
WP15 (2 Voice/4 Data)
WP16 (3 Voice/4 Data)
WP17 (4 Voice/4 Data)
WP18 (2 Voice/3 Data)

WP19 (1 Voice/2 Data/1 FTV)
WP20 (1 Outdoor Phone Cable)
WP21 (1 Voice/4 Data)
WP22 (3 Voice/3 Data)
WP23 (4 Voice)
WP24 (2 Voice/6 Data)
WP25 (4 Voice/2 Data)
WP26 (2 Voice/2 Data/2 FTV)
WP27 (3 Voice/2 Data)
WP28 (8 Data)
WP29 (2 Voice/4 Data/1 FTV)
WP30 (1 Public/pay telephone)
WP31 (1 Voice/3 Data/1 FTV)
WP32 (2 Data/1 FTV/1 RTV)
WP33 (8 Voice)
WP40 (1 Monitoring Access Control)
WP41 (2 Data/1 Fiber)
WP42 (3 Data/1 Fiber)
WP43 (4 Data/1 Fiber)
WP44 (5 Data/1 Fiber)
WP45 (6 Data/1 Fiber)
WP46 (4 Data/4 Fiber)
WP47 (4 Data/1 FTV)
WP48 (2 Voice/3 Data/1 FTV)
WP49 (2 Fiber)
WP50 (1 Fiber)
WP51 (1 Data/1 Fiber)
WP52 (1 Voice/1 Data/1 Fiber)
WP53 (2 Voice/1 Data/1 Fiber)
WP54 (1 Voice/1 Data/1 FTV/1 Fiber)
WP55 (1 Voice/2 Data/1 Fiber)
WP57 (1 Data/1 Fiber/1 FTV)
WP58 (3 Data/1 FTV)
WP59 (1 Fiber/1 FTV)
WP60 (1 FTV/1 RTV)
WP61 (1 RTV)

WP62 (1 FTV)
WP64 (2 Data/1 FTV)
WP65 (1 Security Coax)
WP66 (1 House/Campus Phone)
WP67 (1 Data/1 FTV)
WP68 (2 Data/2 FTV)
WP69 (6 Data)
WP70 (2 Voice/1 FTV)
WP71 (2 Voice/1 Data/1 FTV)
WP72 (1 Voice/1 FTV)
WP73 (3 Voice)
WP74 (5 Data)
WP75 (1Voice/5 Data)
WP76 (3 Voice/1 Data)
WP77 (10 Data)
WP78 (AV: 2 DMX512)
WP79 (AV: 4 LC/4 BNC/1 DT/6 XLR/2 DMX512)
WP80 (AV: 2 LC/2 Data)
WP80B (AV: 2 LC/1 BNC/2 Data)
WP81 (AV: 2 LC/1 BNC/2 Data/1 Voice)
WP101 (TP: 1 UTP Data)
WP102 (TP: 2 UTP Data)
WP103 (TP: 2 UTP Data/2 STP Data)
WP104 (TP: 5 UTP Data/2 STP Data)
WP105 (TP: 5 UTP Data)
WP106 (TP: 4 UTP Data/2 STP Data)
WP111 (TP: 1 UTP Data - configured per installation)
WP112 (TP: 1 STP Data male RJ45 in 6"x6"x3" box)
WP113 (TP: 2 UTP Data - configured per installation)
WP114 (TP: 3 UTP Data - configured per installation)
WP115 (TP: 4 UTP Data - configured per installation)
WP116 (TP: 1 UTP Data male RJ45 in 6"x6"x3" box)
WP117 (TP: 5 UTP Data - configured per installation)
WP118 (TP: 6 UTP Data - configured per installation)

Note: FTV is forward television (coax); RTV is Return

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TeleVision (SDI digital camera signal). AV is Audio-Visual, TP is Telepresence. All Station Fiber is duplex.

Following is a description of each type of WP that has been defined by Rutgers University.

WP1 (1 Voice/1 Data)

Wiring Plan WP1 and others containing voice and data shall consist of one voice and one data cable. At the station end, the voice and data cables shall be terminated on an eight-position ANSI/TIA-568.2-D designation T568B modular jack. At the HC end, the voice cable shall be terminated on a 110-style wall-mounted, punch-down block and the data cable shall be terminated on an ANSI/TIA-568.2-D wiring designation T568B, modular jack, wall or rack mounted as appropriate.

WP1A (1 Voice/1 Data)

Same as WP1 mounted in Steelcase furniture faceplate.

WP2 (1 Voice/1 Data/1 FTV)

WP1 with an RG6 type quad shield coaxial cable added for viewing of campus programming. At the station end the coax cable shall be terminated on an F coupler. At the Horizontal Cross-connect (HC) end a 10-foot coil of coax cable shall be coiled on the ladder tray above the video field.

WP2A (1 Voice/1 Data/1 FTV)

Same as WP2 mounted in Steelcase furniture faceplate.

WP2C (1 Voice/1 Data/1 FTV) Coiled in Podium

WP1 with an RG6 type quad shield coaxial cable added for viewing of campus programming. All station cable ends shall terminate in the appropriate connectors and 3 ft. of cable shall be coiled in the podium.

WP3 (1 Voice)

WP3 shall consist of a single voice cable. At the station end, the cable shall be terminated on an eight-position ANSI/TIA-568.2-D designation T568B modular jack. At the Horizontal cross-Connect (HC) end, the cable shall be terminated on a 110-style wall-mounted punch-down block.

WP4 (2 Voice)

WP4 shall consist of two voice cables. Terminations and cable runs as per WP3.

WP5 (1 Data)

WP5 shall consist of a single data cable for connecting a computer workstation. At the station end, the data cable shall be terminated on an eight-position ANSI/TIA-568.2-D designation T568B modular jack. At the Horizontal Cross-connect (HC) end, the data cable shall be terminated on an ANSI/TIA-568.2-D designation T568B modular jack, wall or rack mounted as appropriate.

WP5W (1 VoIP Wall Phone)

WP5W shall consist of a single data cable to support a VoIP wall phone. At the station end, all four pairs of the cable shall be terminated on an eight-position modular ANSI/TIA-568.2-D designation T568B wall phone jack mounted in a stainless-steel mounting plate. Jack shall be mounted at a height of 42" for handicap access. At the Horizontal Cross-connect (HC) end, the cable shall be terminated on an ANSI/TIA-568.2-D designation T568B modular jack, wall or rack mounted as appropriate.

WP5AP (1 Data)

Same as WP5 without faceplate; includes twenty-foot slack coil for connecting to wireless access points.

WP6 (2 Data)

WP6 shall consist of two data cables. Terminations and cable runs as per WP5.

WP6AP (2 Data)

Same as WP6 without faceplate; includes twenty-foot slack coil for connecting to wireless access points.

WP7 (3 Data)

WP7 shall consist of three data cables. Terminations and cable runs as per WP5.

WP8 (4 Data)

WP8 shall consist of four data cables. Terminations and cable runs as per WP5.

WP9 (1 Voice/3 Data)

WP9 shall consist of one voice cable and three data cables. Terminations and cable runs as per WP1.

WP10 (1 Wall Telephone)

WP10 shall consist of a voice cable to support a wall phone. At the station end, all four pairs of the voice cable shall be terminated on an eight-position modular ANSI/TIA-568.2-D designation T568B wall phone jack mounted in a stainless-steel mounting plate. Jack shall be mounted at a height of 42" for handicap access. At the Horizontal cross-Connect (HC) end, the cable shall be terminated on a 110-style wall-mounted punch-down block.

WP11 (1 Voice/2 Data)

WP11 shall consist of one voice cable and two data cables. Terminations and cable runs as per WP1.

WP11A (1 Voice/2 Data)

Same as WP11 mounted in Steelcase furniture faceplate.

WP12 (2 Voice/1 Data)

WP12 shall consist of two voice cables and one data cable. Terminations and cable runs as per WP1.

WP13 (2 Voice/2Data)

WP13 shall consist of two voice cables and two data cables. Terminations and cable runs as per WP1.

WP13A (2 Voice/2Data)

Same as WP13 mounted in Steelcase furniture faceplate.

WP14 (2 Voice/2 Data/1 FTV)

WP14 shall consist of two voice cables, two data cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP15 (2 Voice/4 Data)

WP15 shall consist of two voice cables and four data cables. Terminations and cable runs as per WP1.

WP16 (3 Voice/4 Data)

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WP16 shall consist of three voice cables and four data cable. Terminations and cable runs as per WP1.

WP17 (4 Voice/4 Data)

WP17 shall consist of four voice cables and four data cable. Terminations and cable runs as per WP1.

WP18 (2 Voice/3 Data)

WP18 shall consist of two voice cables and three data cable. Terminations and cable runs as per WP1.

WP19 (1 Voice/2 Data/1 FTV)

WP19 shall consist of one voice cable, two data cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP20 (1 Outdoor Phone Cable)

WP20 shall consist of a direct-burial cable in a 1" conduit. This wire plan will be used to support isolated telephones, such as outdoor emergency telephones. At the station end, the cable shall be connected to screw terminals on the telephone or an eight-position ANSI/TIA-568.2-D designation T568B modular jack. At the Main Cross-connect (MC) or Horizontal Cross-connect (HC) end, a screw-terminal block shall be used to transition to cross-connect or a patch cord. Where this cable leaves a building, a transient protector meeting applicable codes and sections of UL 497 shall be provided at the entrance point. The Vendor shall be responsible for compliance with all federal, state and local regulations in effect.

WP21 (1 Voice/4 Data)

WP21 shall consist of one voice cable and four data cables. Terminations and cable runs as per WP1.

WP22 (3 Voice/3 Data)

WP22 shall consist of three voice cables and three data cables. Terminations and cable runs as per WP1.

WP23 (4 Voice)

WP23 shall consist of four voice cables. Terminations and cable runs as per WP3.

WP24 (2 Voice/6 Data)

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WP24 shall consist of two voice cables and six data cables. Terminations and cable runs as per WP1.

WP25 (4 Voice/2 Data)

WP25 shall consist of four voice cables and two data cables. Terminations and cable runs as per WP1.

WP26 (2 Voice/2 Data/2 FTV)

WP26 shall consist of two voice cables, two data cables and two quad shield RG-6 coaxial cables. Terminations and cable runs as per WP2.

WP27 (3 Voice/2 Data)

WP27 shall consist of three voice cables and two data cables. Terminations and cable runs as per WP1.

WP28 (8 Data)

WP28 shall consist of eight data cables. Terminations and cable runs as per WP5.

WP29 (2 Voice/4 Data/1 FTV)

WP29 shall consist of two voice cables, four data cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP30 (1 Public/Pay Telephone)

WP30 shall consist of a voice cable to support a public/pay phone. At the station end, all four pairs of the voice cable shall be terminated on an eight-position ANSI/TIA-568.2-D designation T568B modular public/pay phone jack. Jack shall be mounted at a height of 42" for handicap access. At the Horizontal Cross-connect (HC) end, the cable shall be terminated on a 110-style wall-mounted punch-down block.

WP31 (1 Voice/3 Data/1 FTV)

WP31 shall consist of one voice cable, three data cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP32 (2 Data/1 FTV/1 RTV)

WP32 shall consist of two data cable (terminations and cable runs as per WP1), one quad shield RG-6 coaxial cable for FTV and one Belden 1694A/1695A (yellow) SDI cable for RTV. At the station end the FTV coax cable shall be terminated on

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an F coupler. For the RTV, terminate the SDI cable on a Belden FSNS6BNCU BNC connector coupled to a BNC adapter in a double-gang, deep back box. At the Horizontal Cross-connect (HC) end 10-foot coils of cable shall be coiled on the ladder tray above the video field.

WP33 (8 Voice)

WP33 shall consist of eight voice cables. Terminations and cable runs as per WP3.

WP40 (1 Monitoring/Access Control)

WP40 shall consist of one four pair cable. This wire plan will be used to support various monitoring, control and public safety systems. At the station end, the cable shall remain unterminated with a twelve-inch pigtail and shall be concealed by a blank cover plate. At the Horizontal Cross-Connect (HC) end, the cable shall be terminated on a 110-style wall-mounted punch-down block.

WP41 (2 Data/1 Fiber)

WP41 shall consist of two data cables and one duplex multimode fiber optic cable. Terminations and cable runs as per WP5 and WP50.

WP42 (3 Data/1 Fiber)

WP42 shall consist of three data cables and one duplex multimode fiber optic cable. Terminations and cable runs as per WP5 and WP50.

WP43 (4 Data/1 Fiber)

WP43 shall consist of four data cables and one duplex multimode fiber optic cable. Terminations and cable runs as per WP5 and WP50.

WP44 (5 Data/1 Fiber)

WP44 shall consist of five data cables and one duplex multimode fiber optic cable. Terminations and cable runs as per WP5 and WP50.

WP45 (6 Data/1 Fiber)

WP45 shall consist of six data cables and one duplex multimode fiber optic cable. Terminations and cable runs as per WP5 and WP50.

WP46 (4 Data/4 Fiber)

WP46 shall consist of four data cables and four duplex multimode fiber optic cables. Terminations and cable runs as per WP5 and WP50.

WP47 (4 Data/ 1 FTV)

WP47 shall consist of four data cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP48 (2 Voice/3 Data/1 FTV)

WP48 shall consist of two voice cables, three data cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP49 (2 Fiber)

WP49 shall consist of two duplex multimode fiber optic cables. At the station end, the fiber cables shall be terminated on SC connectors and mounted in ANSI/TIA-568.3-D designation 568SC (duplex) modular adapters. At the HC end, the fiber cables shall be terminated on SC connectors and mounted in ANSI/TIA-568.3-D designation 568SC modular adapters (wall or rack mounted as appropriate) or spliced through to the MC and terminated as above.

WP50 (1 Fiber)

WP50 shall consist of one duplex multimode fiber optic cable. At the station end, the fiber cable shall be terminated on SC connectors and mounted in ANSI/TIA-568.3-D designation 568SC (duplex) modular adapters. At the HC end, the fiber cable shall be terminated on SC connectors and mounted in ANSI/TIA-568.3-D designation 568SC modular adapters (wall or rack mounted as appropriate) or spliced through to the MC and terminated as above.

WP51 (1 Data/1 Fiber)

WP51 shall consist of one data cable and one duplex multimode fiber optic cable. Terminations and cable runs as per WP5 and WP50.

WP52 (1 Voice/1 Data/1 Fiber)

WP52 shall consist of one voice cable, one data cable and one duplex multimode fiber optic cable. Terminations and cable runs as per WP1 and WP50.

WP53 (2 Voice/1 Data/1 Fiber)

WP53 shall consist of two voice cables, one data cable and one duplex multimode fiber optic cable. Terminations and cable runs as per WP1 and WP50.

WP54 (1 Voice/1 Data/1 FTV/1 Fiber)

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WP54 shall consist of one voice cable, one data cable, one quad shield RG-6 coaxial cable and one duplex multimode fiber optic cable. Terminations and cable runs as per WP2 and WP50.

WP55 (1 Voice/2 Data/1 Fiber)

WP55 shall consist of one voice cable, two data cables and one duplex multimode fiber optic cable. Terminations and cable runs as per WP1 and WP50.

WP57 (1 Data/1 Fiber/1 FTV)

WP57 shall consist of one data cable, one RG-6 quad shield coaxial cable and one duplex multimode fiber optic cable. Terminations and cable runs as per WP2 and WP50.

WP58 (3 Data/1 FTV)

WP58 shall consist of three data cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP59 (1 Fiber/1 FTV)

WP59 shall consist of one RG-6 quad shield coaxial cable and one duplex multimode fiber optic cable. Terminations and cable runs as per WP2 and WP50.

WP60 (1 FTV/1 RTV)

WP60 shall consist of one quad shield RG-6 coaxial cable for FTV and one Belden 1694A/1695A (yellow) SDI cable for RTV. At the station end, 1-foot coils of cable shall be provided in a double gang deep back box with a single gang blank faceplate. At the Horizontal Cross-connect (HC) end 10-foot coils of cable shall be coiled on the ladder tray above the video field.

WP61 (1 RTV)

WP61 shall consist of one Belden 1694A/1695A (yellow) SDI cable. At the station end, 1-foot coil of cable shall be provided in a double gang deep back box with a single gang blank faceplate. At the Horizontal Cross-connect (HC) end 10-feet of cable shall be coiled on the ladder tray above the video field.

WP62 (1 FTV)

WP62 shall consist of one quad shield RG-6 coaxial cable. At the station end the coax cable shall be terminated on an F-coupler. At the Horizontal Cross-connect (HC) end a 10-foot coil of coax cable shall be coiled on the ladder tray above the video field.

WP64 (2 Data/1 FTV)

WP64 shall consist of two data cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP65 (1 Security Coax)

WP65 shall consist of one quad shield RG-6 coaxial cable. Both ends of the cable shall be terminated on F-connectors. At both the station and Horizontal Cross-connect (HC) ends, a 3-foot coil of cable shall be provided in a 6 in. by 6 in. pull box.

WP66 (1 House/Campus Phone)

WP66 shall consist of a voice cable to support a campus phone. At the station end, 12 inches of cable shall be coiled in the existing campus phone housing. Where an existing campus phone housing does not exist, 12 inches of cable shall be coiled in a new 6 in. by 6 in. pull box. At the Horizontal Cross-connect (HC) end, the cable shall be terminated on a 110-style wall-mounted punch-down block.

WP67 (1 Data/1 FTV)

WP67 shall consist of one data cable and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP68 (2 Data/2 FTV)

WP68 shall consist of two data cables and two quad shield RG-6 coaxial cables. Terminations and cable runs as per WP2.

WP69 (6 Data)

WP69 shall consist of six data cables. Terminations and cable runs as per WP5.

WP70 (2 Voice/1 FTV)

WP70 shall consist of two voice cables and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP71 (2 Voice/1 Data/1 FTV)

WP71 shall consist of two voice cables, one data cable and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

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WP72 (1 Voice/1 FTV)

WP72 shall consist of one voice cable and one quad shield RG-6 coaxial cable. Terminations and cable runs as per WP2.

WP73 (3 Voice)

WP73 shall consist of three voice cables. Terminations and cable runs as per WP3.

WP74 (5 Data)

WP74 shall consist of five data cables. Terminations and cable runs as per WP5.

WP75 (1 Voice/5 Data)

WP75 shall consist of one voice cable and five data cables. Terminations and cable runs as per WP1.

WP76 (3 Voice/1 Data)

WP76 shall consist of three voice cables and one data cable. Terminations and cable runs as per WP1.

WP77 (10 Data)

WP77 shall consist of ten data cables. Terminations and cable runs as per WP5.

WP78 (AV)

WP78 shall consist of two DMX512 connectors and cables with stainless steel faceplate.

WP79 (AV)

WP79 shall consist of:

- 4 - 16GFC multimode fiber with duplex LC connectors
- 4 - 12G-SDI cable with BNC connectors
- 1 - Digital Triax cable and connector
- 2 - Communications XLR Belden 1325A cables with 2-male connectors
- 4 - Audio Tie Lines XLR Belden 9451P cables with 2-male and 2-female connectors
- 2 - I/O Parallel DMX512 Belden 82841 cables with 1-male and 1-female connectors

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WP80 (AV)

WP80 shall consist of:

- 2 - 16GFC multimode fiber with duplex LC connectors
- 2 - Data cables and connectors

WP80B (AV)

WP80B shall consist of:

- 2 - 16GFC multimode fiber with duplex LC connectors
- 2 - Data cables and connectors
- 1 - 12G-SDI cable with BNC connectors

WP81 (AV)

WP81 shall consist of:

- 2 - 16GFC multimode fiber with duplex LC connectors
- 2 - Data cables and connectors
- 1 - 12G-SDI cable with BNC connectors
- 1 - Voice cable and connectors

WP101 (TP)

WP101 shall consist of 1 x 4-UTP data cable terminated on an RJ45 jack

WP102 (TP)

WP102 shall consist of 2 x 4-UTP data cables terminated on an RJ45 jack

WP103 (TP)

WP103 shall consist of two 4-pair shielded data cables terminated on RJ45 jacks and two 4-pair UTP data cables terminated on RJ45 jacks

WP104 (TP)

WP104 shall consist of two 4-pair shielded data cables terminated on RJ45 jacks and five 4-pair UTP data cables terminated on RJ45 jacks

WP105 (TP)

WP105 shall consist of five 4-pair UTP data cables terminated on RJ45 jacks

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WP106 (TP)

WP106 shall consist of two 4-pair shielded data cables terminated on RJ45 jacks and three 4-pair UTP data cables terminated on RJ45 jacks

WP111 (TP)

WP111 shall consist of one 4-pair-UTP data cable terminated on an RJ45 jack (configured per installation)

WP112 (TP)

WP112 shall consist of one 4-pair shielded data cable terminated on RJ45 male connector with a 6"x6"x3" box

WP113 (TP)

WP113 shall consist of two 4-pair UTP data cables terminated on RJ45 jacks (configured per installation)

WP114 (TP)

WP114 shall consist of three 4-pair UTP data cables terminated on RJ45 jacks (configured per installation)

WP115 (TP)

WP115 shall consist of four 4-pair UTP data cables terminated on RJ45 jacks (configured per installation)

WP116 (TP)

WP116 shall consist of one 4-pair UTP data cable terminated on RJ45 male connector with a 6"x6"x3" box

WP117 (TP)

WP117 shall consist of five 4-pair UTP data cables terminated on RJ45 jacks (configured per installation)

WP118 (TP)

WP118 shall consist of six 4-pair UTP data cables terminated on RJ45 jacks (configured per installation)