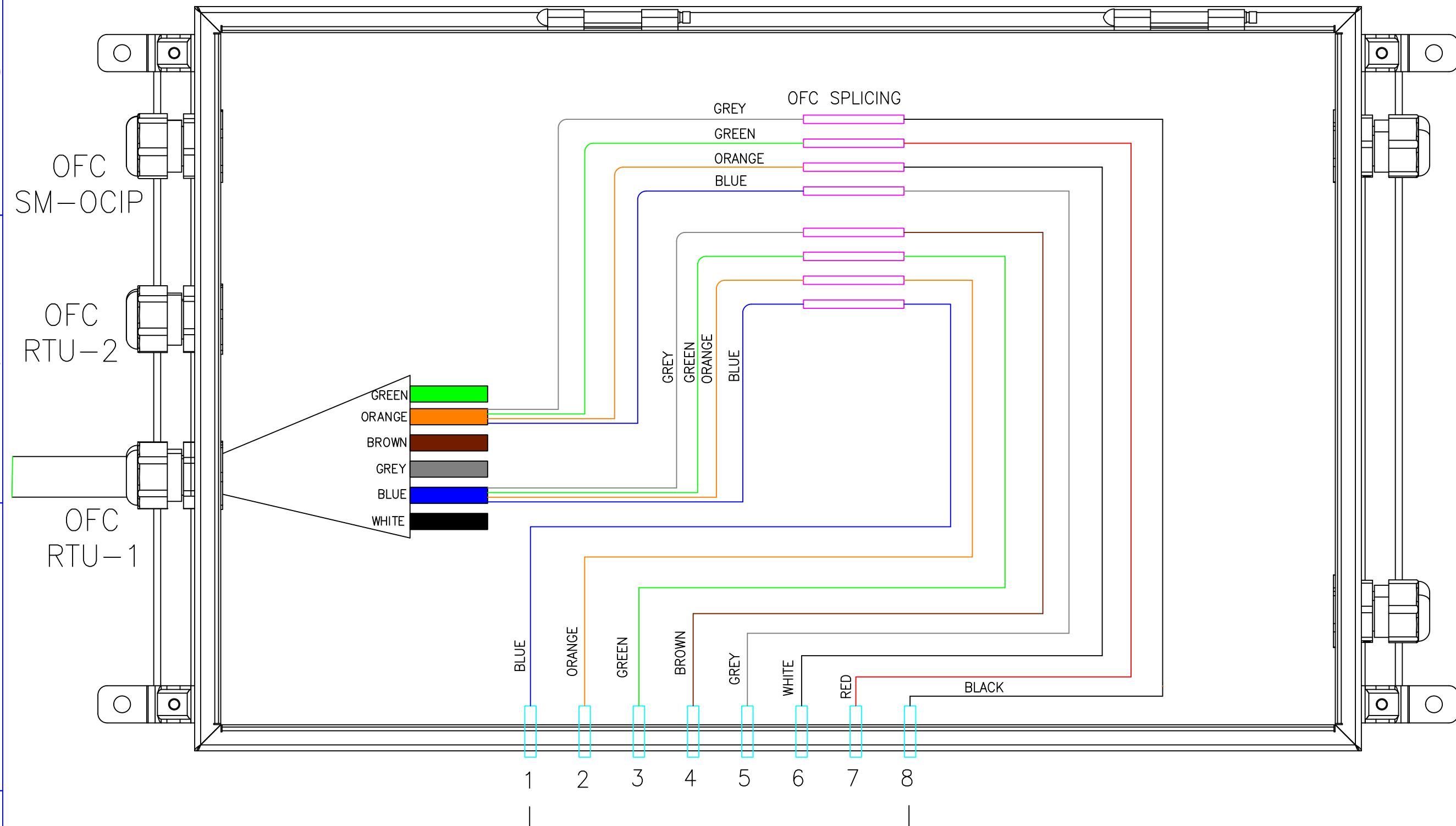


PROJECT: KAVACH		HBL		NAME	DESIGNATION	SIGN.
ASSEMBLY: STATIONARY KAVACH		HBL Engineering Ltd.		CH SIVAJI GANESH	Sr. ENGINEER	Ch.Sivagnesh Ch.Sivagnesh (Sep 26, 2025 09:21:43 GMT+5:30)
SCALE: NTS		SIZE: A3	TITLE: OFC SPLICING BLOCK DIAGRAM WITH RS232 & RS485 OFC CONVERTERS		DRAWING NO. 5 16 49 0559	REV.
SHEET: 1 OF 7		APPROVED Y SUBRAHMANYAM		J V V PRASAD	Sr. MANAGER	J V V Prasad Subrahmanyam (Sep 26, 2025 16:13:29 GMT+5:30)
EFFECTIVE FROM: ALL DIMENSIONS ARE IN mm				TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 - 1993. THIS DRAWING IS THE PROPERTY OF HBL POWER SYSTEMS LIMITED AND MUST NOT BE COPIED, REPRODUCED, TRANSMITTED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF THE COMPANY.		

24F STATION TERMINATION PANEL

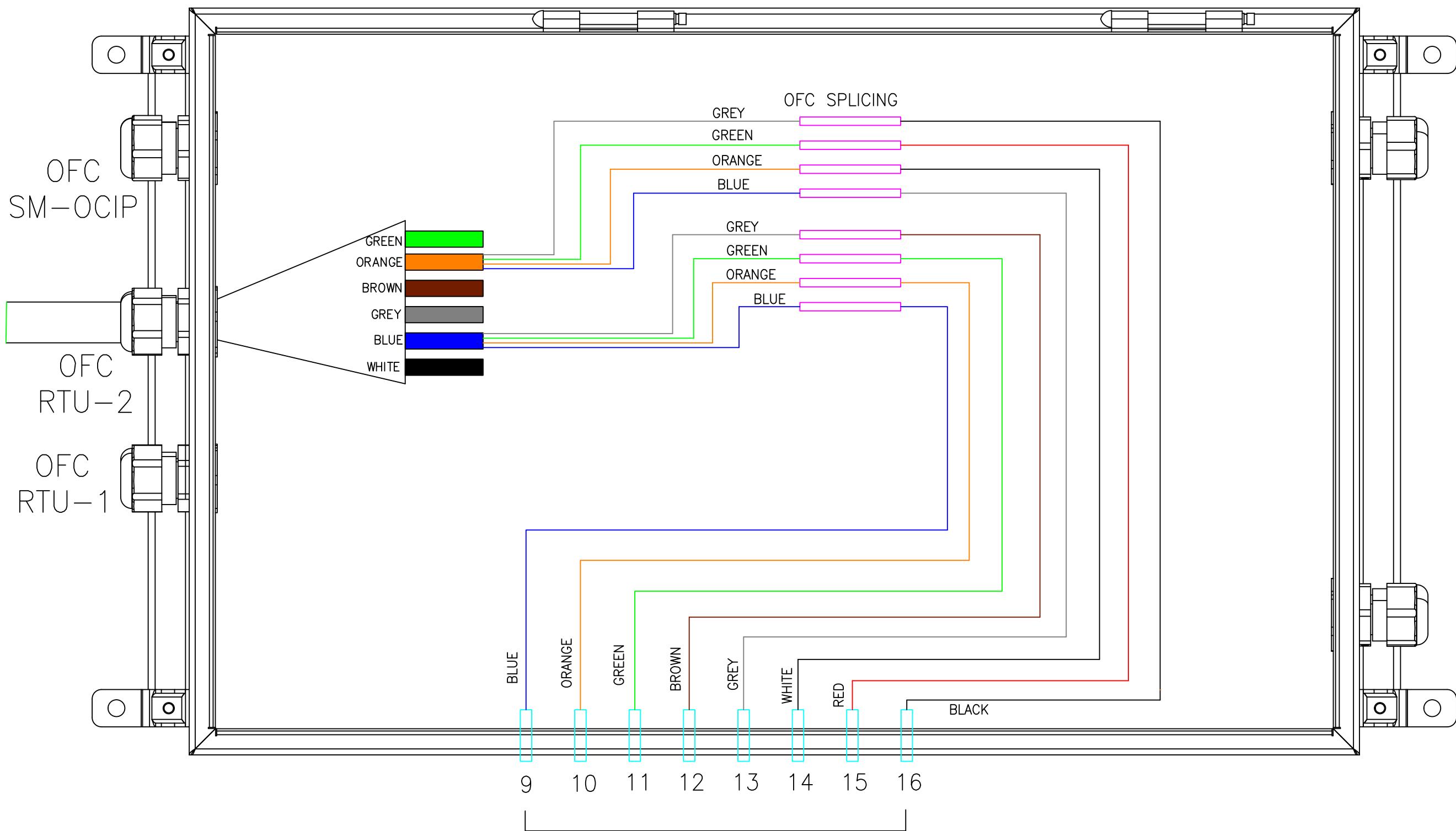


**ST-ST OFC Patch cables
connected to RS232-OFC
Converter-1 in STCAS**

- Note:
1. 24F(OFC RTU-1)fiber core cable has 6 color tubes.(Blue,Orange,Green,Brown,Grey&White)
 2. Each color tube has 4 color fibers.(Blue,Orange,Green&Grey)
 3. Blue color tube fiber set connected to 1 to 4 ST slots inside the panel.
 4. Orange color tube fiber set connected to 5 to 8 ST slots inside the panel.
 5. Packet of 8 different colors of fiber optic pigtailed are provided inside the panel.

PROJECT: KAVACH		HBL HBL Engineering Ltd.		NAME	DESIGNATION	SIGN.
DESIGN	CH SIVAJI GANESH	Sr. ENGINEER	Ch.Sivaganesh Ch.Sivaganesh/Sep 26, 2025 09:21:43 GMT+5:30			
ASSEMBLY: STATIONARY KAVACH			CHECKED	J V V PRASAD	Sr. MANAGER	JVSNV Prasad
SCALE: NTS	SIZE: A3	TITLE: RTU-1 INTERNAL OFC SPLICING CONNECTION IN 24F PANEL		APPROVED	Y SUBRAHMANYAM (ENGINEERING)	GENERAL MANAGER (ENGINEERING) Subrahmanyam/Y Sep 26, 2025 16:13:28 GMT+5:30
	SHEET: 2 OF 7			DRAWING NO.	5 16 49 0559	REV. 1.0
EFFECTIVE FROM: ALL DIMENSIONS ARE IN mm		TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 - 1993. THIS DRAWING IS THE PROPERTY OF HBL POWER SYSTEMS LIMITED AND MUST NOT BE COPIED, REPRODUCED, TRANSMITTED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF THE COMPANY.				

24F STATION TERMINATION PANEL



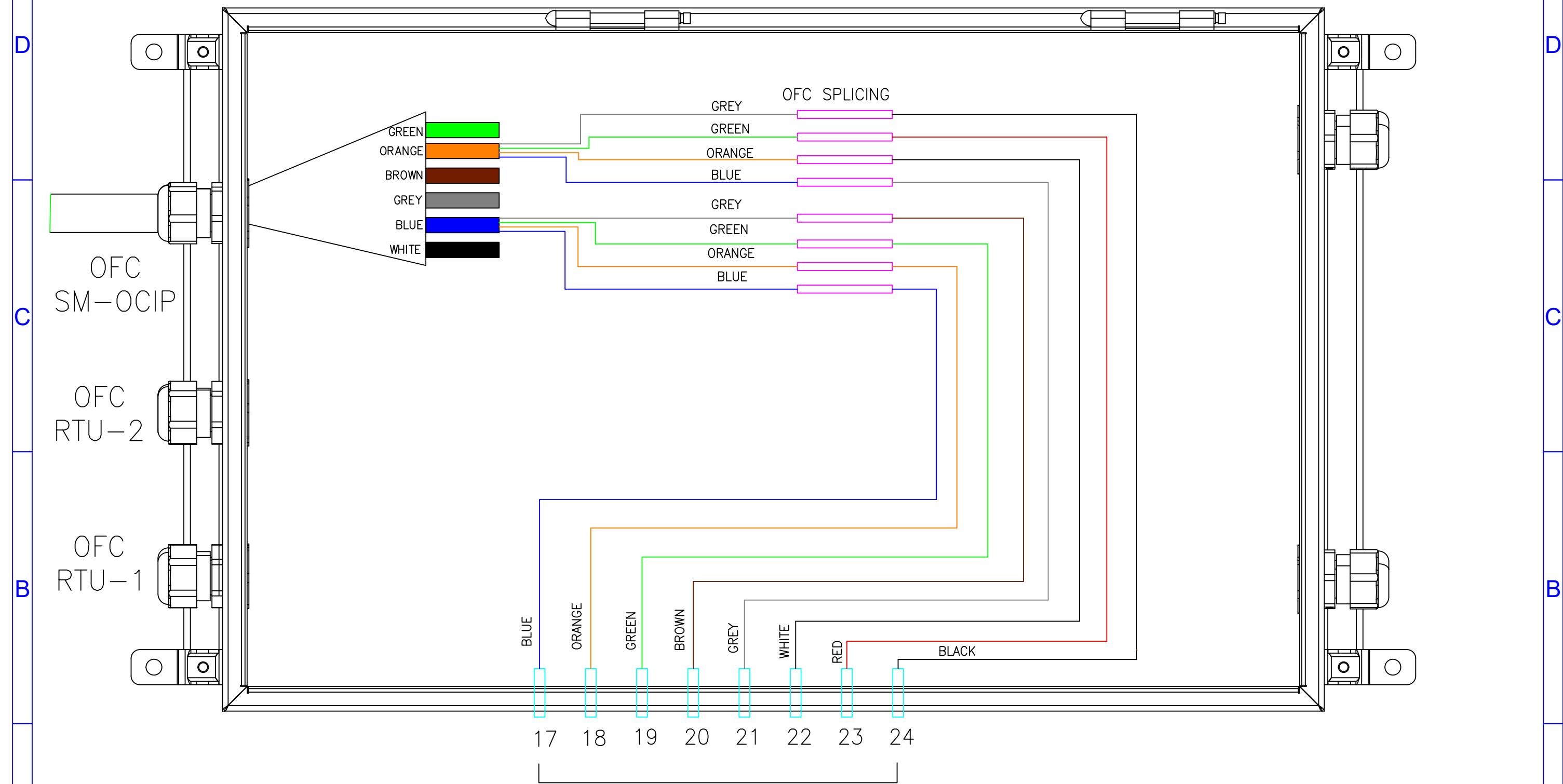
**ST-ST OFC Patch cables
connected to RS232-OFC
Converter-2 in STCAS**

Note:

1. 24F(OFC RTU-2)fiber core cable has 6 color tubes.(Blue,Orange,Green,Brown,Grey&White)
2. Each color tube has 4 color fibers.(Blue,Orange,Green&Grey)
3. Blue color tube fiber set connected to 9 to 12 ST slots inside the panel.
4. Orange color tube fiber set connected to 13 to 16 ST slots inside the panel.
5. Packet of 8 different colors of fiber optic pigtauls are provided inside the panel.

PROJECT: KAVACH		HBL HBL Engineering Ltd.		NAME	DESIGNATION	SIGN.
DESIGN	CH SIVAJI GANESH	Sr. ENGINEER	Ch.Sivaganesh Ch.Sivaganesh/Sep 26, 2025 09:21:43 GMT+5:30			
ASSEMBLY:	J V V PRASAD	Sr. MANAGER	CHECKED		J V S N V Prasad	
STATIONARY KAVACH	Y SUBRAHMANYAM	GENERAL MANAGER (ENGINEERING)	APPROVED	Y SUBRAHMANYAM	GENERAL MANAGER (ENGINEERING)	Subrahmanyam Y Subrahmanyam Y Subrahmanyam Y Sep 26, 2025 16:13:28 GMT+5:30
SCALE: NTS	SIZE: A3	TITLE: RTU-2 INTERNAL OFC SPlicing CONNECTION IN 24F PANEL		DRAWING NO.	5 16 49 0559	REV.
Sheet:	3 OF 7			PART NO.		1.0
EFFECTIVE FROM:		TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 - 1993.				
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		ALL DIMENSIONS ARE IN mm				

24F STATION TERMINATION PANEL



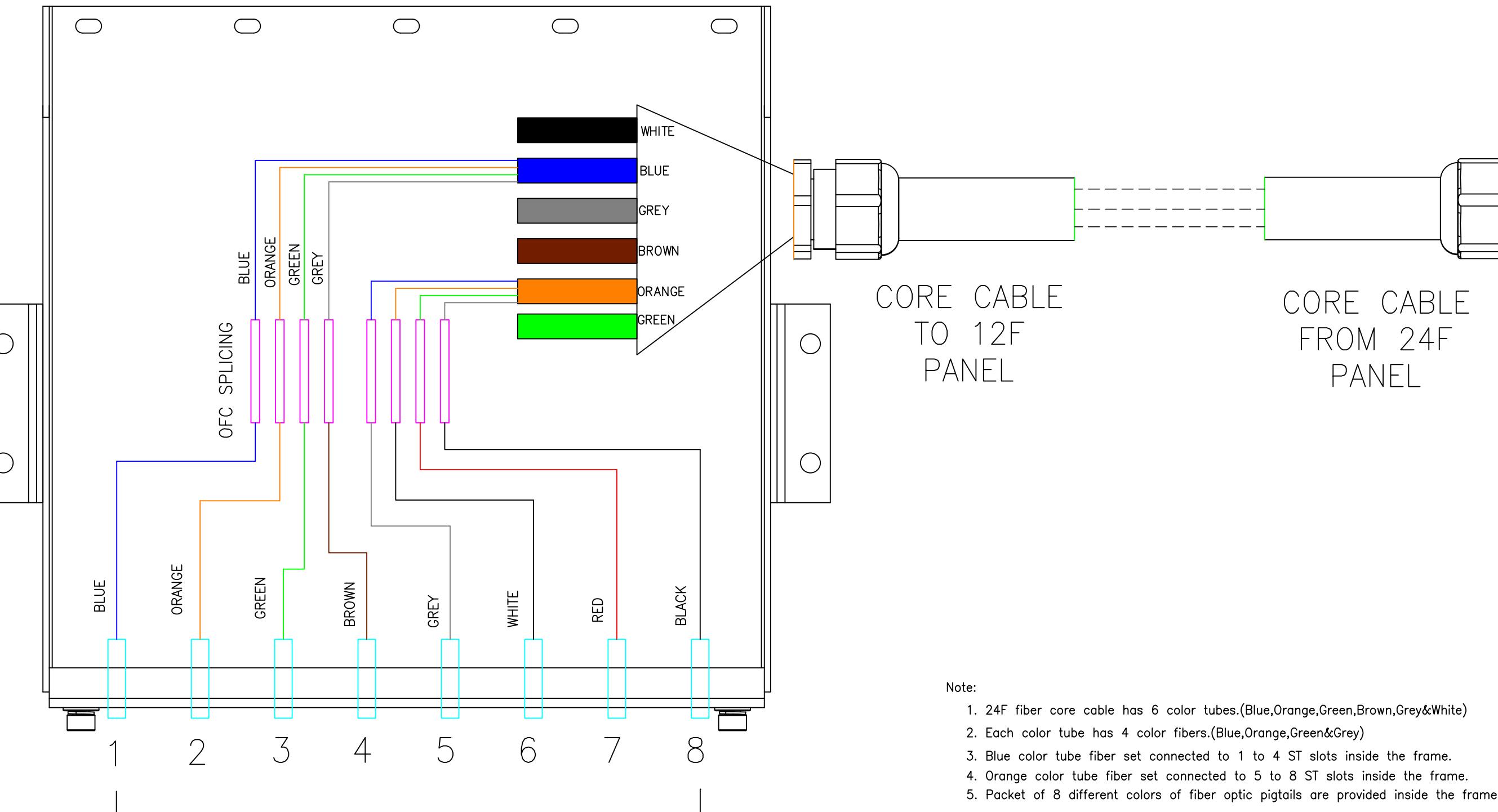
**ST-ST OFC Patch cables
connected to RS485-OFC
Converter in STCAS**

Note:

1. 24F(OFC SM-OCIP)fiber core cable has 6 color tubes.(Blue,Orange,Green,Brown,Grey&White)
2. Each color tube has 4 color fibers.(Blue,Orange,Green&Grey)
3. Blue color tube fiber set connected to 17 to 20 ST slots inside the panel.
4. Orange color tube fiber set connected to 18 to 21 ST slots inside the panel.
5. Packet of 8 different colors of fiber optic pigtails are provided inside the panel.

PROJECT: PROJ KAVACH		HBL HBL Engineering Ltd.		NAME	DESIGNATION	SIGN.				
DESIGN	CH SIVAJI GANESH	Sr. ENGINEER	Ch.Sivagnesh Ch.Sivagnesh (See 26, 2025-09-21 13:23 GMT+5:30)							
ASSEMBLY: STATIONARY KAVACH					CHECKED	J V V PRASAD				
SCALE: NTS	SIZE: A3	TITLE: SM-OCIP INTERNAL OFC SPLICING CONNECTION IN 24F PANEL				APPROVED				
	SHEET: 4 OF 7					Y SUBRAHMANYAM GENERAL MANAGER (ENGINEERING) Subrahmanyam Y Subrahmanyam (See 26, 2025-09-21 13:23 GMT+5:30)				
EFFECTIVE FROM: ALL DIMENSIONS ARE IN mm						TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 - 1993.				
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						PART NO.				
						REV. 1.0				

FIBER DISTRIBUTION FRAME IN 12F PANEL



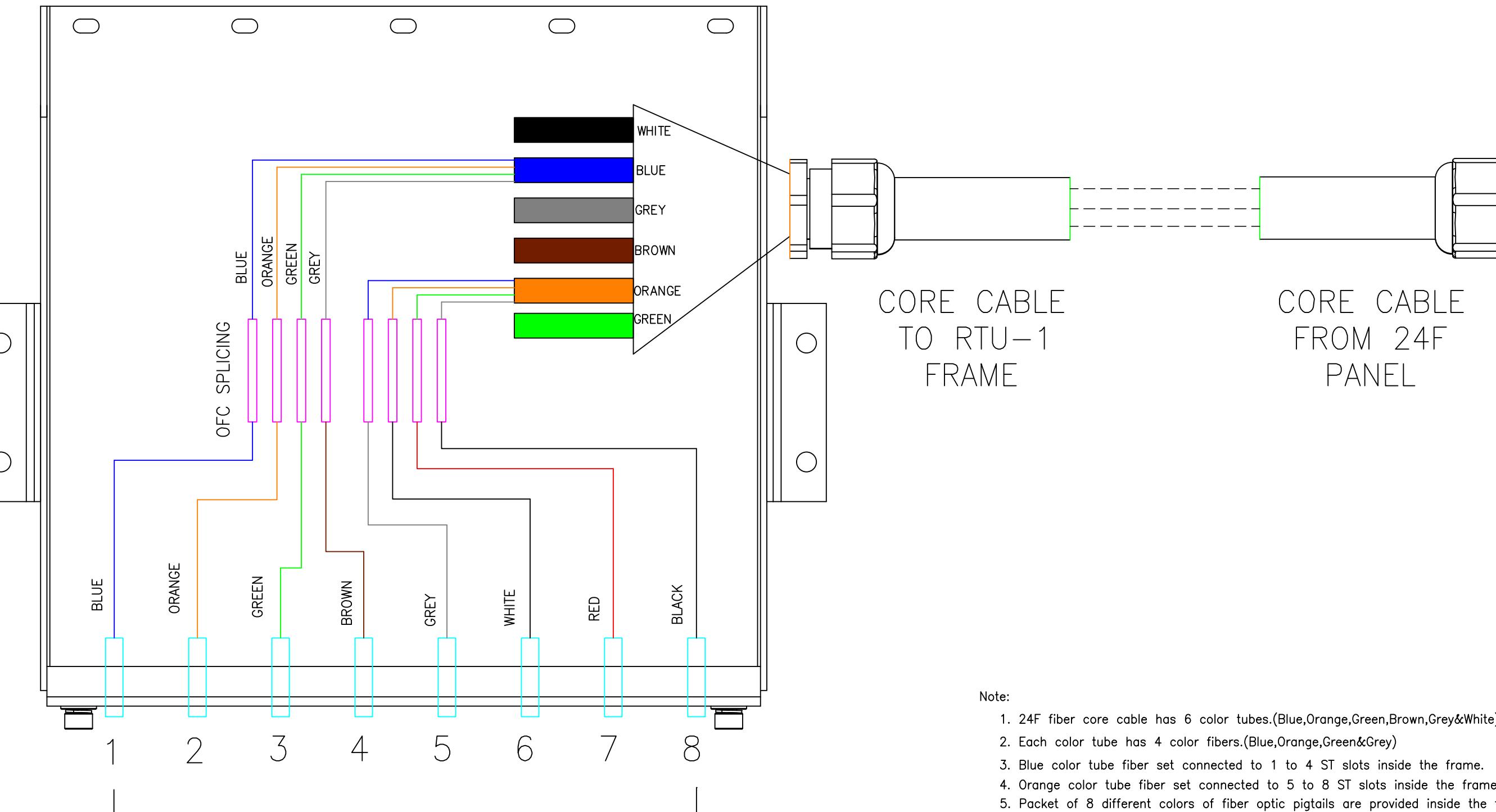
ST-ST OFC Patch cables
connected to RS485-OFC
Converter in SM-OCIP

Note:

1. 24F fiber core cable has 6 color tubes.(Blue,Orange,Green,Brown,Grey&White)
2. Each color tube has 4 color fibers.(Blue,Orange,Green&Grey)
3. Blue color tube fiber set connected to 1 to 4 ST slots inside the frame.
4. Orange color tube fiber set connected to 5 to 8 ST slots inside the frame.
5. Packet of 8 different colors of fiber optic pigtailes are provided inside the frame.

PROJECT: KAVACH		HBL HBL Engineering Ltd.		NAME	DESIGNATION	SIGN.
DESIGN	CH SIVAJI GANESH	Sr. ENGINEER	Ch.Sivaganesh Ch.Sivaganesh (Sep 26, 2025 09:21:43 GMT+5:30)			
ASSEMBLY: STATIONARY KAVACH					CHECKED	J V V PRASAD
SCALE: NTS	SIZE: A3	TITLE: SMOCIP INTERNAL OFC SPlicing CONNECTION IN 12F PANEL				APPROVED
						Y SUBRAHMANYAM GENERAL MANAGER (ENGINEERING)
						subrahmanyam Y Subrahmanyam Y (Sep 26, 2025 16:13:28 GMT+5:30)
REV.	1.0					
EFFECTIVE FROM:	TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 - 1993.					
ALL DIMENSIONS ARE IN mm						THIS DRAWING IS THE PROPERTY OF HBL POWER SYSTEMS LIMITED AND MUST NOT BE COPIED, REPRODUCED, TRANSMITTED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF THE COMPANY.

FIBER DISTRIBUTION FRAME IN RTU-1



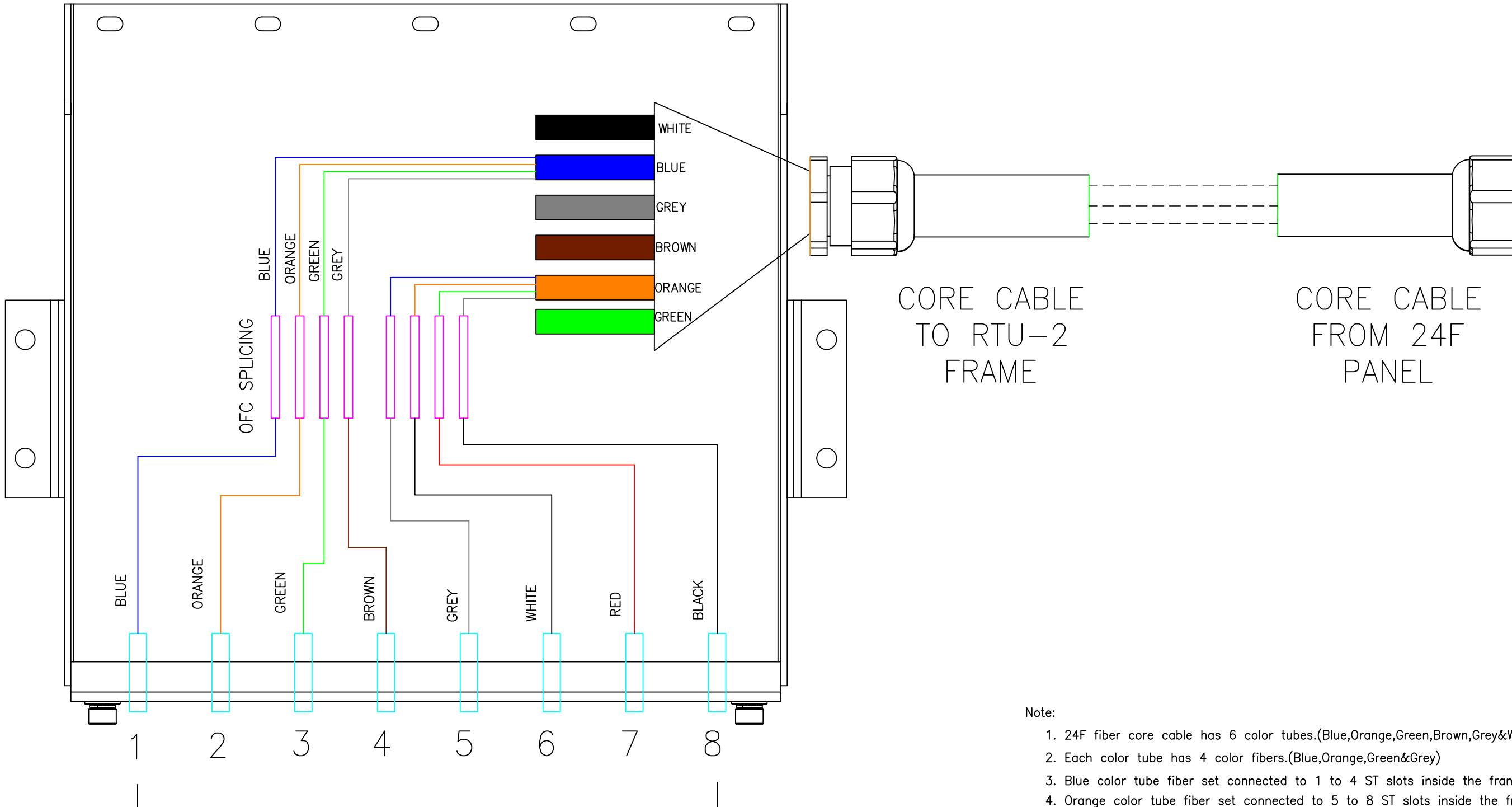
ST-ST OFC Patch cables
connected to RS232-OFC
Converter in RTU-1

Note:

1. 24F fiber core cable has 6 color tubes.(Blue,Orange,Green,Brown,Grey&White)
2. Each color tube has 4 color fibers.(Blue,Orange,Green&Grey)
3. Blue color tube fiber set connected to 1 to 4 ST slots inside the frame.
4. Orange color tube fiber set connected to 5 to 8 ST slots inside the frame.
5. Packet of 8 different colors of fiber optic pigtails are provided inside the frame.

PROJECT: KAVACH		HBL HBL Engineering Ltd.		NAME	DESIGNATION	SIGN.				
DESIGN	CH SIVAJI GANESH			Sr. ENGINEER	Ch.Sivajigesh Ch.Sivajigesh/Sep 26, 2025 09:21:43 GMT+5:30					
ASSEMBLY: STATIONARY KAVACH					CHECKED	J V V PRASAD JVSJV Prasad				
SCALE: NTS	SIZE: A3	TITLE: OFC SPlicing CONNECTION IN RTU-1 FRAME				DRAWING NO. 5 16 49 0559				
	SHEET: 6 OF 7					REV. 1.0				
EFFECTIVE FROM: ALL DIMENSIONS ARE IN mm						TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 - 1993.				
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FIBER DISTRIBUTION FRAME IN RTU-2



ST-ST OFC Patch cables
connected to RS232-OFC
Converter in RTU-2

Note:

1. 24F fiber core cable has 6 color tubes.(Blue,Orange,Green,Brown,Grey&White)
2. Each color tube has 4 color fibers.(Blue,Orange,Green&Grey)
3. Blue color tube fiber set connected to 1 to 4 ST slots inside the frame.
4. Orange color tube fiber set connected to 5 to 8 ST slots inside the frame.
5. Packet of 8 different colors of fiber optic pigtailed are provided inside the frame.

PROJECT: KAVACH		HBL HBL Engineering Ltd.		NAME	DESIGNATION	SIGN.
DESIGN	CH SIVAJI GANESH			Sr. ENGINEER	Ch.Sivajiganes	Ch.Sivajiganes (Sep 26, 2025 09:21:43 GMT+5:30)
CHECKED	J V V PRASAD			Sr. MANAGER	J V S N V Prasad	J V S N V Prasad (Sep 26, 2025 09:21:43 GMT+5:30)
APPROVED	Y SUBRAHMANYAM			GENERAL MANAGER (ENGINEERING)	subrahmanyam Y	subrahmanyam Y (Sep 26, 2025 09:21:43 GMT+5:30)
SCALE: NTS	SIZE: A3	TITLE: OFC SPlicing CONNECTION IN RTU-2 FRAME		DRAWING NO.	5 16 49 0559	REV. 1.0
	SHEET: 7 OF 7			PART NO.		
EFFECTIVE FROM: ALL DIMENSIONS ARE IN mm		TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 - 1993. THIS DRAWING IS THE PROPERTY OF HBL POWER SYSTEMS LIMITED AND MUST NOT BE COPIED, REPRODUCED, TRANSMITTED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF THE COMPANY.				

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Email: sivajiganesh.chennuboyina@hbl.in
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Signature: JWSNV Prasad
JWSNV Prasad (Sep 26, 2025 10:19:28 GMT+5.5)
Email: prasad.jagatha@hbl.in
Title: Sr.Manager

Signature: Subrahmanyam Y
Subrahmanyam Y (Sep 26, 2025 10:19:28 GMT+5.5)
Email: subrahmanyam.yadavalli@hbl.in
Title: GM - Engineering

OFC SPLICING_HARNS_FOR_RS232 & RS485_OFC_CONVERTERS 5 16 49 0559

Final Audit Report

2025-09-26

Created:	2025-09-26 (India Standard Time)
By:	Subrahmanyam Y (subrahmanyam.yadavalli@hbl.in)
Status:	Signed
Transaction ID:	CBJCHBCAABAAmrwzmzKSI_L2X8YArAo-BH3osIVnuo7xi

"OFC SPLICING_HARNS_FOR_RS232 & RS485_OFC_CONVERTERS 5 16 49 0559" History

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2025-09-26 - 9:24:38 AM GMT+5.5- IP address: 122.187.81.114
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2025-09-26 - 9:26:25 AM GMT+5.5
- Email viewed by sivajiganesh.chennuboyina@hbl.in
2025-09-26 - 9:26:55 AM GMT+5.5- IP address: 122.187.81.114
- Signer sivajiganesh.chennuboyina@hbl.in entered name at signing as CH.Sivajiganesh
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