Telephone: (204) 233-7456 Fax: (204) 237-4789

#### **BETTER AIR MANUFACTURING**

#### **AIRFLOW TESTING & BALANCING**

### SEPTEMBER 2024 FILE 26266

ARCHITECT :

ENGINEER :

GENERAL

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MECHANICAL

BETTER AIR MANUFACTURING

VENTILATION :

Tony Mohammed 96-00-20

#### Certification

This is to certify that Air Movement Services Ltd. has balanced the systems described herein to their optimum performance capabilities. The testing and balancing has been performed in accordance with standards published by the Associated Air Balance Council and the results are herein recorded.

Date SEPTEMBER 2024

Associated Air Balance Council Certification Number 96-00-20

Approved by

AIR MOVEMENT SERVICES LTD. 51-B SPEERS ROAD, WINNIPEG, MANITOBA R2J 1M2
BUILDING BETTER AIR MANUFACT

51-B SPEERS ROAD, WINNIPEG, MANITOBA R2J 1M2  TEST SHEET						-		
BUILDING B	ETTER AIR MAN	UFACTI	JRING - MACC	REGO	R MANITOE	ВА		
SYSTEM TI	EST SYSTEM (TE	EST 2)			and the second s	***************************************		
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITHOUT SHUTTER  77 X 77 DUCT; 41.17 SQ. FT.  AVERAGE VELOCITY: 1317 FPM  1317 X 41.17 = 54,221 CFM								
DESIGN AND MANUFACTURER'S DATA FINAL OPERATING CONDITIONS								
FAN MAKE BETTER AIR MANUFACTURING					YSTEM	99	% OF SPE	CIFIED
SIZE FW-72EC								
VOLUME		55	5,000 CFM		54,221			
FAN SPEED		DIR	ECT DRIVE	6	60 HERTZ			
STATIC PRESS	URE		-		-			
AMPERAGE			4.6	3	3.4/3.3/3.4			
POWER 4.0 H	P VOLTAGE	57	5 - 3/60	60	03/602/603			
FILTER PRESSI	JRE DROP				-			
PULLEY POSITION DIRECT DRIVE				MIN	1/4	1/2	2 3/4	MAX
			SYSTEM STATIC I	PRESSU	IRES			
	INLET:	120 NAVE - 100 NAVE -	-0.19"WG		OUTLET:		UNSTABLE	
			DRIVE INFOR	MATION	- December 1985 - Paris de Sandre Caracter de Caracter	224 235 235 235 235 23 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25		
FAN	DRIVE SIZE & GRO	OOVES	SHAFT SIZE		BELT SIZ	E	C TO C OF	SHEAVES
MOTOR	-		_					
			de entre de servicio de la companya				energia de la composição	

"FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

AMCA FAN APPLICATION MANUAL NO. 202

AABC

AIR MOVEMENT SERVICES LTD. 51-B SPEERS ROAD, WINNIPEG, MANITOBA R2J 1M2
BUILDING BETTER AIR MANUFACT
OVOTENA TEST SYSTEM (TEST 3)

51-B SPEE	rs road, winnipeg, manito				TEST SHEET		
BUILDING B	ETTER AIR MAN	UFACT	URING - MACC	REGOR	MANITO	ВА	
SYSTEM T	EST SYSTEM (TI	EST 3)			***************************************		
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITHOUT SHUTTER  77 X 77 DUCT; 41.17 SQ. FT.  AVERAGE VELOCITY: 1161 FPM  1161 X 41.17 = 47,798 CFM							
DESIGN AN	ID MANUFACT	UREF	I'S DATA	FIN.	AL OP	ERAT	ING CONDITIONS
FAN MAKE BETTER AIR MANUFACTURING  SYSTEM 87 % OF SPECIFIED					% OF SPECIFIED		
SIZE FW-72EC							
VOLUME		55	5,000 CFM	4	7,798		
FAN SPEED		DIR	ECT DRIVE	54	HERTZ		
STATIC PRESS	URE		-		<b>30</b>		
AMPERAGE			4.6 3.1/3.0/		/3.0/3.0		
POWER 4.0 H	IP VOLTAGE	57	5 - 3/60	603/	602/603		
FILTER PRESS	URE DROP						
PULLEY POSITI	ON	DIR	ECT DRIVE	MIN	1/4	1	/2 3/4 MAX
			SYSTEM STATIC I	PRESSURE	ES		
	INLET:	A THE CONTRACT OF THE CONTRACT OF THE	-0.13"WG	OL	JTLET:		UNSTABLE
		201/50	DRIVE INFOR	MATION		5020H0000000000000000000000000000000000	
FAN	DRIVE SIZE & GRO	JUVES	SHAFT SIZE -		BELT SIZ	<u>L</u>	C TO C OF SHEAVES
MOTOR			_				
	"F	ELD STATIC	PRESSURE MEASUREMEI	NTS BABELY CO	ORRESPOND.	WITH I ARC	DRATORY

STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

AMCA FAN APPLICATION MANUAL NO. 202

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AIR MOVEMENT SERVICES LTD. 51-B SPEERS ROAD, WINNIPEG, MANITOBA R2J 1M2	
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51-B SPEERS ROAD, WINNIPEG, MANITOBA R2J 1M2  TEST SHEET						TEST SHEET	
BUILDING B	ETTER AIR MAN	UFACT	JRING - MACC	REGO	OR MANITOE	ВА	
SYSTEM T	EST SYSTEM (TI	EST 4)					
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITHOUT SHUTTER 77 X 77 DUCT; 41.17 SQ. FT. AVERAGE VELOCITY: 1051 FPM 1051 X 41.17 = 43,270 CFM							
DESIGN AND MANUFACTURER'S DATA FINAL OPERATING CONDITIONS							
FAN MAKE BETTER AIR MANUFACTURING			5	SYSTEM	79	% OF SPECIFIED	
SIZE FW	-72EC						
VOLUME		55	5,000 CFM		43,270		
FAN SPEED		DIR	ECT DRIVE		51 HERTZ		
STATIC PRESS	URE	-		-			
AMPERAGE		4.6		2.2/2.1/2.2			
POWER 4.0 H	P VOLTAGE	57	5 - 3/60	6	603/602/603		
FILTER PRESSI	JRE DROP				•		
PULLEY POSITION			ECT DRIVE	MIN	1/4	1/	2 3/4 MAX
			SYSTEM STATIC I	PRESS	URES		
INLET: -0.11"WG				OUTLET:		UNSTABLE	
			DRIVE INFOR	MATIO	Ν		
SECULATION OF THE PROPERTY OF	DRIVE SIZE & GROOVES SHAFT SIZE			BELT SIZ	E	C TO C OF SHEAVES	
FAN		-			**		•
MOTOR	-	a de la composition	-				

"FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

AMCA FAN APPLICATION MANUAL NO. 202

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AIR MOVEMENT SERVIC 51-B SPEERS ROAD, WINNIPEG, MANITOI			EXHAUST FAN TEST SHEET					
BUILDING BETTER AIR MANUFACTURING - MACGREGOR MANITOBA								
SYSTEM TEST SYSTEM (TEST 5)								
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITHOUT SHUTTER 77 X 77 DUCT; 41.17 SQ. FT. AVERAGE VELOCITY: 939 FPM 939 X 41.17 = 38,659 CFM								
DESIGN AND MANUFACT	TURER'S DATA	FINAL OPERAT	ING CONDITIONS					
FAN MAKE BETTER AIR MANUI	FACTURING	SYSTEM 70	% OF SPECIFIED					
SIZE FW-72EC			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
VOLUME	55,000 CFM	38,659						
FAN SPEED	DIRECT DRIVE	48 HERTZ						
STATIC PRESSURE	-	-						
AMPERAGE	4.6	1.8/1.9/1.8						
POWER 4.0 HP VOLTAGE	575 - 3/60	603/602/603						
FILTER PRESSURE DROP		-						
PULLEY POSITION	DIRECT DRIVE	MIN 1/4	1/2 3/4 MAX					
	SYSTEM STATIC	PRESSURES						

-0.09"WG OUTLET: UNSTABLE

### DRIVE INFORMATION

	DRIVE SIZE & GROOVES	SHAFT SIZE	BELT SIZE	C TO C OF SHEAVES
FAN	160	-	-	-
MOTOR	<b>20</b>	_		

"FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

AMCA FAN APPLICATION MANUAL NO. 202

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INLET:

AIR MOVEMENT SERVIC 51-B SPEERS ROAD, WINNIPEG, MANITO		EXHAUST FAN TEST SHEET						
BUILDING BETTER AIR MANUFACTURING - MACGREGOR MANITOBA								
SYSTEM TEST SYSTEM (TEST 6)								
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITHOUT SHUTTER 77 X 77 DUCT; 41.17 SQ. FT. AVERAGE VELOCITY: 754 FPM 754 X 41.17 = 31,042 CFM								
DESIGN AND MANUFACT	TURER'S DATA	FINAL OPERAT	ING CONDITIONS					
FAN MAKE BETTER AIR MANUI	FACTURING	SYSTEM 56	% OF SPECIFIED					
SIZE FW-72EC		01012m	70 01 01 2011 12B					
VOLUME	55,000 CFM	31,042						
FAN SPEED	DIRECT DRIVE	42 HERTZ						
STATIC PRESSURE	-	-						
AMPERAGE	4.6	1.07/1.06/1.07						
POWER 4.0 HP VOLTAGE	575 - 3/60	603/602/603						
FILTER PRESSURE DROP		-						
PULLEY POSITION	DIRECT DRIVE	MIN 1/4	1/2 3/4 MAX					
	SVSTEM STATIC	DDEOOUDEO						

SYSTEM STATIC PRESSURES

	INLET:	-0.05"WG	OUTLET:	UNSTABLE
		DRIVE INFORMATIO	N	
	DRIVE SIZE & GROOVES	SHAFT SIZE	BELT SIZE	C TO C OF SHEAVES
FAN	-	-	-	•
MOTOR		-		

"FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

AMCA FAN APPLICATION MANUAL NO. 202

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51-B SPEERS ROAD, WINNIPEC, MANITOBA R2J 1M2  TEST SHEET							
BUILDING B	ETTER AIR MAN	UFACT	JRING - MACC	REGOR MANITO	ВА		
SYSTEM TI	EST SYSTEM (TI	EST 7)	**************************************				
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITH SHUTTER  77 X 77 DUCT; 41.17 SQ. FT.  AVERAGE VELOCITY: 1210 FPM  1210 X 41.17 = 49,816 CFM							
DESIGN AN	D MANUFACT	UREF	'S DATA	FINAL OP	ERATIN	NG CONDITI	ONS
FAN MAKE BET	RING	SYSTEM	91	% OF SPE	CIFIED		
SIZE FW-72EC							
VOLUME		55	5,000 CFM	49,816			
FAN SPEED		DIR	ECT DRIVE	60 HERTZ	Market in the Control of the Control		
STATIC PRESS	URE		-	-			
AMPERAGE			4.6	4.0/3.9/4.0			
POWER 4.0 H	P VOLTAGE	57	75 - 3/60	603/602/603			
FILTER PRESSI	JRE DROP			_			
PULLEY POSITION DIRECT DRIVE			ECT DRIVE	MIN 1/4	1/2	3/4	MAX
			SYSTEM STATIC I	PRESSURES			
	INLET:		-0.22"WG	OUTLET:		UNSTABLE	
			DRIVE INFOR	MATION			
FAN	DRIVE SIZE & GR	DOVES	SHAFT SIZE	BELT SI	ZE	C TO C OF S	SHEAVES
FAN MOTOR							
	an 1991 (1991) o Tropologico (1991) e Repúblico (1991) e Repúblico (1991) e Repúblico (1991) e Repúblico (1991)						

"FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

AMCA FAN APPLICATION MANUAL NO. 202

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AIR MOVEMENT SERVICE 51-B SPEERS ROAD, WINNIPEG, MANITOE		EXHAUST FAN TEST SHEET					
BUILDING BETTER AIR MAN	UFACTURING - MACC	GREGOR MANITOBA					
SYSTEM TEST SYSTEM (TE	SYSTEM TEST SYSTEM (TEST 8)						
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITH SHUTTER 77 X 77 DUCT; 41.17 SQ. FT. AVERAGE VELOCITY: 1009 FPM 1009 X 41.17 = 41,541 CFM							
DESIGN AND MANUFACT	ΓURER'S DATA	FINAL OPERAT	ING CONDITIONS				
FAN MAKE BETTER AIR MANUFACTURING SYSTEM 76 % OF SPECIFIED							
SIZE FW-72EC							
VOLUME	55,000 CFM						
FAN SPEED	DIRECT DRIVE	54 HERTZ					
STATIC PRESSURE	-	-					
AMPERAGE	4.6	2.8/2.9/2.8					
POWER 4.0 HP VOLTAGE	575 - 3/60	603/602/603					
FILTER PRESSURE DROP		-					
PULLEY POSITION	DIRECT DRIVE	MIN 1/4	1/2 3/4 MAX				
SYSTEM STATIC PRESSURES							

-0.19"WG OUTLET:

**UNSTABLE** INLET: **DRIVE INFORMATION** DRIVE SIZE & GROOVES SHAFT SIZE BELT SIZE C TO C OF SHEAVES FAN MOTOR -

> "FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"
>
> AMCA FAN APPLICATION MANUAL NO. 202

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AIR MOVEMENT SERVICE 51-B SPEERS ROAD, WINNIPEG, MANITOI		EXHAUST FAN TEST SHEET				
BUILDING BETTER AIR MAN	UFACTURING - MACC	GREGOR MANITOBA				
SYSTEM TEST SYSTEM (TE	EST 9)					
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITH SHUTTER 77 X 77 DUCT; 41.17 SQ. FT. AVERAGE VELOCITY: 871 FPM 871 X 41.17 = 35,859 CFM						
DESIGN AND MANUFACT	ΓURER'S DATA	FINAL OPERAT	ING CONDITIONS			
FAN MAKE BETTER AIR MANUI	FACTURING	SYSTEM 65	% OF SPECIFIED			
SIZE FW-72EC	<b>0.0.</b>	,, o. o. o. o. o.				
VOLUME	55,000 CFM	35,859				
FAN SPEED	DIRECT DRIVE	51 HERTZ				
STATIC PRESSURE	-	-				
AMPERAGE	4.6	2.3/2.2/2.3				
POWER 4.0 HP VOLTAGE	575 - 3/60	603/602/603				
FILTER PRESSURE DROP		-				

SYSTEM STATIC PRESSURES

	INLET:	-0.16"WG	OUTLET:	UNSTABLE
		DRIVE INFORMATIO	N	
	DRIVE SIZE & GROOVES	SHAFT SIZE	BELT SIZE	C TO C OF SHEAVES
FAN	-	-	-	-
MOTOR	•	-		

"FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

AMCA FAN APPLICATION MANUAL NO. 202

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12/SEP/2024

26266

AIR MOVEMENT SERVIC 51-B SPEERS ROAD, WINNIPEG, MANITO		EXHAUST FAN TEST SHEET				
BUILDING BETTER AIR MAN	UFACTURING - MACC	GREGOR MANITOBA				
SYSTEM TEST SYSTEM (TI	EST 10)					
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITH SHUTTER 77 X 77 DUCT; 41.17 SQ. FT. AVERAGE VELOCITY: 797 FPM 797 X 41.17 = 32,812 CFM						
DESIGN AND MANUFACT	ΓURER'S DATA	FINAL OPERATING	CONDITIONS			
FAN MAKE BETTER AIR MANUI	FACTURING	SYSTEM 60	% OF SPECIFIED			
SIZE FW-72EC						
VOLUME	55,000 CFM	32,812				
FAN SPEED	DIRECT DRIVE	48 HERTZ				
STATIC PRESSURE	-	-				
AMPERAGE 4.6		1.8/1.9/1.8				
POWER 4.0 HP VOLTAGE	575 - 3/60	603/602/603				
FILTER PRESSURE DROP		-				
PULLEY POSITION	DIRECT DRIVE	MIN 1/4 1/2	3/4 MAX			

SYSTEM STATIC PRESSURES

	INLET:	-0.14"WG	OUTLET:	UNSTABLE
		DRIVE INFORMATIO	N	
	DRIVE SIZE & GROOVES	SHAFT SIZE	BELT SIZE	C TO C OF SHEAVES
FAN	-	-	-	-
MOTOR	-	-		

"FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

AMCA FAN APPLICATION MANUAL NO. 202

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AMS	<b>AIR MOVEMENT SERVICES LTD.</b> 51-B SPEERS ROAD, WINNIPEG, MANITOBA R2J 1M2
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	OVEMENT SERVIC IS ROAD, WINNIPEG, MANITOE							
BUILDING BETTER AIR MANUFACTURING - MACGREGOR MANITOBA								
SYSTEM TEST SYSTEM (TEST 11)								
FAN CAPACITY ESTABLISHED:  - MAIN DUCT PITOT TUBE TRAVERSE  - SUM OF PITOT TUBE TRAVERSES  - SUM OF READINGS AT INTAKE(S)  LARGE CONE WITH SHUTTER  77 X 77 DUCT; 41.17 SQ. FT.  AVERAGE VELOCITY: 676 FPM 676 X 41.17 = 27,831 CFM								
DESIGN AN	D MANUFACT	URER	'S DATA	F	INAL OPE	RATIN	IG CONDITIO	ONS
FAN MAKE BETTER AIR MANUFACTURING SIZE FW-72EC			5	SYSTEM	51	% OF SPEC	IFIED	
VOLUME	VOLUME 55,000 CFM		,000 CFM	27,831				
FAN SPEED		DIRECT DRIVE		42 HERTZ				
STATIC PRESSI	STATIC PRESSURE		-		-			
AMPERAGE		4.6		1.1/1.0/1.3				
POWER 4.0 H	P VOLTAGE	575 - 3/60		603/602/603				
FILTER PRESSURE DROP					-			
PULLEY POSITION		DIRECT DRIVE		MIN	] [] N 1/4	1/2	3/4	MAX
			SYSTEM STATIC	PRESS	URES	DECONDRESSES CONTRACTOR CONTRACTO		
	INLET:		-0.11"WG		OUTLET:		UNSTABLE	
			DRIVE INFOR	MATIO	N			
	DRIVE SIZE & GR	DOVES	SHAFT SIZE		BELT SIZ	E	C TO C OF S	HEAVES
FAN			-		W		_	
MOTOR								

"FIELD STATIC PRESSURE MEASUREMENTS RARELY CORRESPOND WITH LABORATORY STATIC PRESSURE MEASUREMENTS UNLESS THE FAN INLET AND OUTLET CONDITIONS ARE EXACTLY THE SAME AS THE INLET AND OUTLET CONDITIONS IN THE LABORATORY"

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12/SEP/2024

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