

**WORTHAM THEATER CENTER
CULLEN THEATER
HOUSTON, TEXAS**



**BACKSTAGE
TECHNICAL
INFORMATION
PACKET**

WORTHAM CENTER OPERATING COMPANY
“A non profit organization founded to support backstage operations.”



WORTHAM CENTER OPERATING COMPANY

RULES AND REGULATIONS FOR USERS

The WCOC is a non-profit organization founded for the purpose of maintaining and operating the backstage equipment at the Wortham Theater Center. Our normal house crew consists of a House Carpenter, House Electrician, House Soundman and House Propman. The fiscal year 2020/2021 crew rate charge for non-profit organizations is \$44.20/hour per man, which includes all employer related expenses such as taxes, insurance and benefits. A rate of \$66.00/hour per man shall be charged to all local and non-local organizations considered to be corporate entities regardless of their non-profit status.

1. Crew estimates (total labor charges + 10%) must be paid in full a minimum of thirty (30) days prior to your event. Special circumstances may reduce this minimum to ten (10) days at the discretion of the Director of Backstage Operations. Any funds not used will be refunded in a timely fashion following your event.
2. A lamp replacement fee of \$60.00 per day will be charged to the User for each day the theater is leased.
3. Unless prior arrangements have been made with WCOC, the User shall be responsible for issuing the call for backstage crew (other than House Crew) involved in the event. Labor charges for any additional crew are billed by another organization and are not reflected in the WCOC House Crew estimate. Depending upon the additional crew requirements, WCOC can estimate these labor charges and handle payment but only in the capacity of a payroll agent not as an employer.
4. Labor conditions such as overtime, meal penalties, recording fees, etc., will be charged on the same basis as in other professional venues within the City of Houston. Dependent upon the extent of equipment used and the size of the User's backstage crew, the hours charged on a daily basis for the WCOC crew may reflect an additional half-hour of time over and above the hours charged by the User's stage crew. This half-hour increment reflects any time, prior to the call, during meal breaks and after the call that the WCOC crew is performing opening and closing procedures to the theater.
5. There shall be absolutely no food, drink or smoking on-stage unless it is part of the event. The User is responsible for notification of this policy to their performers, employees, etc.
6. WCOC is not responsible for the cost or procurement of expendables that may be necessary for your event; including but not limited to, tape, tie line, lighting gel, lumber, hardware or other theatrical paraphernalia. ***Piano tuning is the responsibility of the User, not WCOC***
7. On-stage activity before or after the WCOC crew call, or while the WCOC crew are on meal break, is strictly forbidden.

WORTHAM CENTER OPERATING COMPANY

HOUSE CREW WAGES & CONDITIONS

This information sheet is designed to assist performing arts organizations in the planning of their theatrical productions in order to control time and labor costs in the theater.

As per written agreement between the WCOC and Houston First Corporation, the WCOC will supply a maximum of four (4) House Crew technicians to staff your production. Each member of the House Crew is hired for their specific expertise in the four theatrical departments and will act as House Carpenter, House Electrician, House Soundman and House Propman on behalf of the WCOC. Each member of the House Crew is responsible for the proper and safe operation of the WCOC equipment associated with his position. All members of the House Crew are charged with the responsibility of maintaining a safe working environment in the theater and have the authority to correct any unsafe condition that may exist. Also by agreement with the City, the House Crew shall be the first called and the last to leave the theater for any crew call. The current all inclusive crew rate is \$44.20/hour per man for local non-profit organizations and is effective through June 30, 2021. A rate of \$66.00/hour per man shall be charged to all local and non-local organizations considered to be corporate entities regardless of their non-profit status. Hourly conditions shall follow the local agreements used at this and other professional venues in the City of Houston.

Organizations that utilize large stagehand crews have the option of using the WCOC house crew as their heads of department. We strongly recommend this for those organizations, which do not have full-time staff members to act as their department heads. The WCOC House Crew is generally the most experienced and the most qualified members of the stagehand crew to act in this capacity. If the House Crew is not utilized as the department heads either in part or in whole then guidelines are presented below on their required use in the theater.

House Crew usage requirements:

Front of Curtain:

Front of curtain activities such as small ensembles, corporate meetings, graduations, etc. will require a minimum of three (3) House Crew technicians.

Work Calls:

Normal conditions require the use of the entire House Crew, however, some circumstances may dictate as few as two (2) members of the House Crew depending upon the use of the main stage. The number of departments (Carps, Elect, Sound, Props) that are required to perform the work call will determine the actual number of House Crew needed. If the work call does not involve use of the main stage (i.e., reh. room, props) then only that member of the House Crew associated with the department utilized in the work call will be necessary.

Rehearsals:

Normal rehearsals require the use of the entire House Crew, however, worklight rehearsals may dictate as few as three (3) members of the House Crew. The number of departments that are required for a worklight rehearsal is the determining factor in calculating the number of House Crew technicians that are needed. As an example: a worklight rehearsal will require the House Carpenter plus the House Soundman if communications or amplification is needed and/or the House Propman if an orchestra or props is utilized. Or: a lighting rehearsal will require the House Carpenter plus the House Electrician and if communications is needed the House Soundman. If any of the Wortham rehearsal rooms are utilized, then no House Crew member is necessary unless WCOC equipment is utilized.

**WORTHAM THEATER CENTER
LILLIE AND ROY CULLEN THEATER**

STAGE AND HOUSE INFORMATION

Description	Information
Seating Capacity	approx. 1100
Proscenium Width	38'
Proscenium Height	24'
Stage depth (plaster line to back wall)	48' 3"
Apron depth (plaster line to apron edge)	4'
Stage width (center line to stage left rail)	35'
Stage width (center line to stage right wall)	43'
Floor to Grid (subway grating - 3/4" opening)	69'
Clearance under Gallery	35'
Centerline to Sound Mix position	78'
Centerline to Light Booth	84'
Centerline to Balcony Rail	62'
Centerline to Followspot Booth	108'
Fly Rail (combo hemp & synthetic - 7/8")	Stage Left
Counterweight System (loft blocks overhead - subway grating floor)	93 sets (6" centers)
Arbor Capacity	1500 lbs
System Pipe length #1 & #2 (1-1/2" sch40)	52'
System Pipe length #3 - #93 (1-1/2" sch40)	48' (56' 6" w/ Extensions)
System Pipe trims	High 66' - Low 4'
Counterweight	100,000 lbs. 35's & 17.5's
Forestage System Pipes (3 - Motorized)	36' / 2,000 lbs. cap.
Stage Floor (black)	200 lbs./sf. cap. - 1/4" Masonite
Stage Access from House	Enclosed Stairs - SL & SR of Pit
Stage Manager's Console	Stage Right
Communication System	ClearCom
Video Camera views	Stage & Conductor
Sound Mix position	Center - Under balcony
Light Booth (sealed)	Center - behind Mix position
Orchestra Pit (Bayreuth style w/ concealed porch area)	Hydraulic
Power (up & off stage right - 43' from center line)	3 - 400 amp 3 ph disconnects
Power - Sound - Conditioned (usr rear wall)	1 - 60 amp 3 ph disconnects
Power (loading dock)	2 - 200 amp 3 ph disconnects
Freight Elevator	12' x 28' x 13'
Cullen Theater Dock Door	20' x 20'
Exterior Dock Door (enclosed loading dock)	13' 10" h x 39' w
Loading Dock	Shared 25' x 40' space w/ Brown Theater
Loading Dock capacity (42" h w/ levelers)	Two semi's

**WORTHAM THEATER CENTER
LILLIE AND ROY CULLEN THEATER**

SOFT GOOD INVENTORY

SOFT GOODS	FABRIC / COLOR	SIZE	COUNTERWEIGHT
House Curtain	32 oz. Maroon Velour	32' 0" h x 52' 0" w	
Teaser	26 oz. Black Velour	9' 0" h x 52' 0" w	4 w/ pipe
Borders (10)	26 oz. Black Velour	9' 0" h x 52' 0" w	4 w/ pipe
Legs (8 pr)	26 oz. Black Velour	32' 0" h x 12' 0" w	4
Tabs (8)	26 oz. Black Velour	32' 0" h x 9' 0" w	2
Full Black	26 oz. Black Velour	32' 0" h x 52' 0" w	7 w/ pipe
Full Black	26 oz. Black Velour	32' 0" h x 54' 0" w	
Split Black (2 pc)	26 oz. Black Velour	32' 0" h x 32' 0" w	7-1/2
Split Black (2 pc)	26 oz. Black Velour	32' 0" h x 38' 0" w	9-1/2
Front Proj. Screen (2)	Gerriets "Opera" white	32' 0" h x 52' 0" w	5 w/ pipe
Rear Proj. Screen (2)	Gerriets "Studio" grey	32' 0" h x 52' 0" w	5 w/ pipe
Sharkstooth Scrim	Black	28' 0" h x 52' 0" w	2-1/2 w/ pipe
Sharkstooth Scrim	White	28' 0" h x 52' 0" w	2-1/2 w/ pipe
Bounce	Natural Muslin	32' 0" h x 52' 0" w	4 w/ pipe

The quantities and sizes mentioned above are true to the best of our knowledge.

We reserve the right to alter the sizes as well as the quantities of these soft goods as needed for practical operation of the theater.

**WORTHAM THEATER CENTER
LILLIE AND ROY CULLEN THEATER**

LIGHTING INVENTORY

QUANTITY	FIXTURE	MANUFACTURER	LAMP - WATTAGE	GEL FRAME
1	EOS (booth)	ETC		
1	ION (backstage)	ETC		
1	Remote Focus Unit	ETC		
603 / 10	Dimmers - 2.4k / 6.0k	Strand CD80		
*8	Source Four 5 deg	ETC 405-750	HPL - 750w	14" x 14"
*24	Source Four 10 deg	ETC 410-750	HPL - 750w	12" x 12"
*32/10	Source Four 19 deg	ETC 419-750	HPL - 750w/575w	6.25" x 6.25"
*51/19	Source Four 26 deg	ETC 426-750	HPL - 750w/575w	6.25" x 6.25"
*95/5	Source Four 36 deg	ETC 436-750	HPL - 750w/575w	6.25" x 6.25"
1	Source Four 50 deg	ETC 450-750	HPL - 575w	6.25" x 6.25"
*24	Source Four Zoom 15 - 30 deg	ETC 41530	HPL - 750w	7.5" x 7.5"
*32	Source Four Par (all lenses)	ETC PAR-EA	HPL - 575w	7.5" x 7.5"
*40	8" Fresnel	Strand #3480	BVW - 2000w	10" x 10"
*9	VL2500 Intelligent Light Fixtures	Varilite	700w Short Arc	n/a
4	MAC Viper Performance	Martin	1000w Short Arc	n/a
*7/7	3 Light Molefar Cyc-strip	Mole-Richardson #2841	FDB - 1500w	15.5" x 18.375"
12	3 Light Pallas Groundrow	Strand #5923	FHM - 1000w	10.5" x 11.75"
*3	Xenon Followspot	Lycian #1290XLT	2000w	
10	Par 64 Can	Strand #4755	1000w assorted	10" x 10"
*64	4" Forerunner Scroller	Wybron 4540		
*20	7" Forerunner Scroller	Wybron 7140		
10	Drop-in Iris Unit	ETC 400RS		
30	Pattern Holder (A-size)	ETC 400PH-A		
15	Pattern Holder (B-size)	ETC 400PH-B		
8	14" Top Hats (5 deg)	ETC 405TH		
24	12" Top Hats (10 deg)	ETC 410TH		
75	6-1/4" Top Hats (19-50 deg)	ETC 400TH		
30	6-1/4" Half Hats (19-50 deg)	ETC 400HH		
5	14" Donuts (5 deg)	ETC 405DN		
5	12" Donuts (10 deg)	ETC 410DN		
50	6-1/4" Donuts (19-50 deg)	ETC 400DN		
6	Castered Adjustable Stand, 5' - 9'			
*8	Castered 20' Boom			
32	Side Arms			
2	50 lb. Boom Bases			
65	10' 12/3 S Cables			
50	25' 12/3 S Cables			
10	50' 12/3 S Cables			
*40/40	36" Two-fers			

*Fixed Front-of-House and Repertory light plot fixtures.

**WORTHAM THEATER CENTER
LILLIE AND ROY CULLEN THEATER
CIRCUIT CHART**

COVE #3												
Stage Left						Stage Right						
1^	3^	5	7	9	11	(24 - 2.4kw circuits)	13	15	17	19	21^	
2^	4^	6	8	10	12	ETC ^5 deg & 10 deg	14	16	18	20	22^	
547* (6.0k)						*Duplicated in Light Booth	(6.0k) 549*					
COVE #2												
Stage Left						Stage Right						
25	27	29	31	33	35	(24 - 2.4kw circuits)	37	39	41	43	45	
26	28	30	32	34	36	24 - ETC 19 deg	38	40	42	44	47	
49 51 53 55 57						(20 - 2.4kw circuits)	59^	61	63	65	67	
flag pod work							pod				ste	
50	52	54	56	58^		18 - ETC 19 deg	60	62	64	66	68	
ste pod						^ iris units	work	pod	flag			
BALCONY RAIL												
Stage Left						Stage Right						
601	602	603	604	605	606	(12 - 2.4kw circuits)	607	608	609	610	611	
612												
FORESTAGE												
Stage Left						Stage Right						
103	105	107	109	111	113	(24 - 2.4kw circuits)	115	117	119	121	123	
104	106	108	110	112	114		116	118	120	122	125	
124 126												
BOX BOOM												
Stage Left						Stage Right						
69*	71	73	75	77	79	(24 - 2.4kw circuits)	81*	83	85	87	89	
70	72	74	76	78	80	22 - ETC Zooms	82	84	86	88	91	
90 92												
LIGHT BOOTH												
Stage Left						Stage Right						
547* (6.0k)	97	98	99			(6 - 2.4kw circuits)	100	101	102			
(6.0k) 549*												
FOLLOWSPOT BOOTH												
Stage Left						Stage Right						
551 (6.0k)	93	94				(4 - 2.4kw circuits)	95	96				
(6.0k) 553												
curtain warmers												

**WORTHAM THEATER CENTER
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ORCHESTRA PIT							
Stage Left				Stage Right			
511	512	513	514	(12 - 2.4kw circuits)	555 <i>(6.0k)</i>	127	129
					557 <i>(6.0k)</i>	131	133
						129	130
						132	134
TRAP ROOM							
515	516	517		(6 - 2.4kw circuits)	518	519	520
							<i>(6.0k)</i> 559
LIGHT GALLERIES							
521	522	523	524	(8 - 2.4kw circuits)	525	526	527
					528		
LIGHT GALLERY - Stage Right							
613	614	615	616	617	618	(24 - 2.4kw circuits)	631
619	620	621	622	623	624		632
625	626	627	628	629	630		633
							634
							635
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**WORTHAM THEATER CENTER
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CIRCUIT CHART**

#1 ELECTRIC												
Stage Left						Stage Right						
135	137	139	141	143	145	(24 - 2.4kw circuits)	147	149	151	153	155	157
136	138	140	142	144	146	(see rep hang)	148	150	152	154	156	158
#1A ELECTRIC												
Stage Left						Stage Right						
159	161	163	165	167	169	(24 - 2.4kw circuits)	171	173	175	177	179	181
160	162	164	166	168	170	(see rep hang)	172	174	176	178	180	182
#2 ELECTRIC												
Stage Left						Stage Right						
183	185	187	189	191	193	(24 - 2.4kw circuits)	195	197	199	201	203	205
184	186	188	190	192	194	(see rep hang)	196	198	200	202	204	206
#2A ELECTRIC												
Stage Left						Stage Right						
207	209	211	213	215		(20 - 2.4kw circuits)	217	219	221	223	225	
208	210	212	214	216		(see rep hang)	218	220	222	224	226	
#3 ELECTRIC												
Stage Left						Stage Right						
227	229	231	233	235	237	(24 - 2.4kw circuits)	239	241	243	245	247	249
228	230	232	234	236	238	(see rep hang)	240	242	244	246	248	250
#3A ELECTRIC												
Stage Left						Stage Right						
251	253	255	257	259		(20 - 2.4kw circuits)	261	263	265	267	269	
252	254	256	258	260		(see rep hang)	262	264	266	268	270	
#4 ELECTRIC												
Stage Left						Stage Right						
271	273	275	277	279	281	(24 - 2.4kw circuits)	283	285	287	289	291	293
272	274	276	278	280	282	(see rep hang)	284	286	288	290	292	294
#5 ELECTRIC												
Stage Left						Stage Right						
295	297	299	301	303	305	(24 - 2.4kw circuits)	307	309	311	313	315	317
296	298	300	302	304	306	(see rep hang)	308	310	312	314	316	318
#6 ELECTRIC												
Stage Left						Stage Right						
319	321	323	325	327	329	(24 - 2.4kw circuits)	331	333	335	337	339	341
320	322	324	326	328	330	(see rep hang)	332	334	336	338	340	342
#7 ELECTRIC												
Stage Left						Stage Right						
343	345	347	349	351	353	(24 - 2.4kw circuits)	355	357	359	361	363	365
344	346	348	350	352	354	(see rep hang)	356	358	360	362	364	366

**WORTHAM THEATER CENTER
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CIRCUIT CHART**

GRID DROP BOX #1												
Stage Left						Stage Right						
367	369	371	373	375	377	(24 - 2.4kw circuits)	379	381	383	385	387	389
368	370	372	374	376	378		380	382	384	386	388	390
GRID DROP BOX #2												
Stage Left						Stage Right						
391	392	393	394	395	396	(12 - 2.4kw circuits)	415	416	417	418	419	420
GRID DROP BOX #3												
Stage Left						Stage Right						
397	398	399	400	401	402	(12 - 2.4kw circuits)	421	422	423	424	425	426
GRID DROP BOX #4												
Stage Left						Stage Right						
403	404	405	406	407	408	(12 - 2.4kw circuits)	427	428	429	430	431	432
GRID DROP BOX #5												
Stage Left						Stage Right						
409	410	411	412	413	414	(12 - 2.4kw circuits)	433	434	435	436	437	438
#1 FLOOR POCKETS												
Stage Left						Stage Right						
439	440	441	442	443	444	(12 - 2.4kw circuits)	463	464	465	466	467	468
#2 FLOOR POCKETS												
Stage Left						Stage Right						
445	446	447	448	449	450	(12 - 2.4kw circuits)	469	470	471	472	473	474
#3 FLOOR POCKETS												
Stage Left						Stage Right						
451	452	453	454	455	456	(12 - 2.4kw circuits)	475	476	477	478	479	480
#4 FLOOR POCKETS												
Stage Left						Stage Right						
457	458	459	460	461	462	(12 - 2.4kw circuits)	481	482	483	484	485	486
UPSTAGE FLOOR POCKETS												
Stage Left						Stage Right						
487	489	491	493	495	497	(24 - 2.4kw circuits)	499	501	503	505	507	509
488	490	492	494	496	498		500	502	504	506	508	510
REAR PROJECTION PLATFORM												
561 (6.0k)	529	530	531	(6 - 2.4kw circuits)			532	533	534	(6.0k)	563	565

CULLEN THEATER
SCROLLER PATCH CONFIGURATION

Pos.Inst#	Type	Dim/Circ	Scrl.Chn	Pos.Inst#	Type	Dim/Circ	Scrl.Chn	Pos.Inst#	Type	Dim/Circ	Scrl.Chn
1st Electric				2nd Electric				3rd Electric			
1E.1	SF36	D.135	1025	2E.1	SF36	D.183	1033	3E.1	SF36	D.227	1041
1E.2	SF36	D.136	1026	2E.2	SF36	D.184	1034	3E.2	SF36	D.228	1042
1E.3	SF26	D.137	1027	2E.3	SF26	D.185	1035	3E.3	SF26	D.229	1043
1E.4	SF26	D.138	1028	2E.4	SF26	D.186	1036	3E.4	SF26	D.230	1044
1E.6	8"Fres	D.140	1065	2E.6	8"Fres	D.188	1069	3E.6	8"Fres	D.232	1073
1E.10	8"Fres	D.144	1066	2E.10	8"Fres	D.192	1070	3E.10	8"Fres	D.236	1074
1E.15	8"Fres	D.148	1067	2E.15	8"Fres	D.196	1071	3E.15	8"Fres	D.240	1075
1E.19	8"Fres	D.152	1068	2E.19	8"Fres	D.200	1072	3E.19	8"Fres	D.244	1076
1E.21	SF26	D.155	1029	2E.21	SF26	D.203	1037	3E.21	SF26	D.247	1045
1E.22	SF26	D.156	1030	2E.22	SF26	D.204	1038	3E.22	SF26	D.248	1046
1E.23	SF36	D.157	1031	2E.23	SF36	D.205	1039	3E.23	SF36	D.249	1047
1E.24	SF36	D.158	1032	2E.24	SF36	D.206	1040	3E.24	SF36	D.250	1048
4th Electric				5th Electric							
4E.1	SF36	D.271	1049	5E.1	SF36	D.295	1057				
4E.2	SF36	D.272	1050	5E.2	SF36	D.296	1058				
4E.3	SF26	D.273	1051	5E.3	SF26	D.297	1059				
4E.4	SF26	D.274	1052	5E.4	SF26	D.298	1060				
4E.6	8"Fres	D.276	1077	5E.6	8"Fres	D.300	1081				
4E.10	8"Fres	D.280	1078	5E.10	8"Fres	D.304	1082				
4E.15	8"Fres	D.284	1079	5E.15	8"Fres	D.308	1083				
4E.19	8"Fres	D.288	1080	5E.19	8"Fres	D.312	1084				
4E.21	SF26	D.291	1053	5E.21	SF26	D.315	1061				
4E.22	SF26	D.292	1054	5E.22	SF26	D.316	1062				
4E.23	SF36	D.293	1055	5E.23	SF36	D.317	1063				
4E.24	SF36	D.294	1056	5E.24	SF36	D.318	1064				
S.L. Booms				S.R. Booms							
SLB1.1	SF26	D.367	1085	SRB1.1	SF26	D.380	1093				
SLB1.2	SF26	D.369	1086	SRB1.2	SF26	D.381	1094				
SLB1.3	SF36	D.367	1085	SRB1.3	SF36	D.380	1093				
SLB1.4	SF36	D.369	1086	SRB1.4	SF36	D.381	1094				
SLB2.1	SF26	D.391	1087	SRB2.1	SF26	D.415	1095				
SLB2.2	SF26	D.392	1088	SRB2.2	SF26	D.416	1096				
SLB2.3	SF36	D.391	1087	SRB2.3	SF36	D.415	1095				
SLB2.4	SF36	D.392	1088	SRB2.4	SF36	D.416	1096				
SLB3.1	SF26	D.397	1089	SRB3.1	SF26	D.421	1097				
SLB3.2	SF26	D.398	1090	SRB3.2	SF26	D.422	1098				
SLB3.3	SF36	D.397	1089	SRB3.3	SF36	D.421	1097				
SLB3.4	SF36	D.398	1090	SRB3.4	SF36	D.422	1098				
SLB4.1	SF26	D.403	1091	SRB4.1	SF26	D.427	1099				
SLB4.2	SF26	D.404	1092	SRB4.2	SF26	D.428	1100				
SLB4.3	SF36	D.403	1091	SRB4.3	SF36	D.427	1099				
SLB4.4	SF36	D.404	1092	SRB4.4	SF36	D.428	1100				

CULLEN THEATER

SCROLLER GEL STRINGS

	8 Booms (32)		Pipe Ends (40)		Fresnel (20)	
EOS Pallette Number	Wybron - Forerunner		Wybron - Forerunner		Wybron - Forerunner	
	Model #4540 - 4"		Model #4540 - 4"		Model #7140 - 7"	
	Units	Units	Units	Units	Units	Units
1	NC	NC	NC	NC	NC	NC
2	L161	Blue	L161	Blue	L161	Blue
3	R56	Lavendar	R56	Lavendar	R90	Dk.Green
4	R33	Pink	R33	Pink	R33	Pink
5	R45	Rose	R45	Rose	R45	Rose
6	R02	Lt. Amber	R02	Lt. Amber	R02	Lt. Amber
7	R03	Dk. Amber	R03	Dk. Amber	R03	Dk. Amber
8	L110	Dk. Pink	L110	Dk. Pink	L110	Dk. Pink
9	R68	Blue	R68	Blue	R68	Blue
10				R26	Red	
11			R37	Pink	L158	Dk. Amber
12	R44	Magenta	R95	Blue-Green	R17	Lt. Amber
13					R57	Lavendar
14					R80	Dk. Blue
15	L158	Dk. Amber	R17	Lt. Amber	L201	NC Blue
16					R21	Dk. Amber
20	R17	Lt. Amber				
21	R95	Blue-Green				
23	L144	Blue	R54	Lavendar		
24	L201	NC Blue	L144	Blue		
26	L152	Amber	L201	NC Blue		
30			L152	Amber		

CULLEN THEATER
SCROLLER PATCH CONFIGURATION

Pos.Inst#	Type	Dim/Circ	Scrl.Chn	Pos.Inst#	Type	Dim/Circ	Scrl.Chn	Pos.Inst#	Type	Dim/Circ	Scrl.Chn
1st Electric				2nd Electric				3rd Electric			
1E.1	SF36	D.135	1025	2E.1	SF36	D.183	1033	3E.1	SF36	D.227	1041
1E.2	SF36	D.136	1026	2E.2	SF36	D.184	1034	3E.2	SF36	D.228	1042
1E.3	SF26	D.137	1027	2E.3	SF26	D.185	1035	3E.3	SF26	D.229	1043
1E.4	SF26	D.138	1028	2E.4	SF26	D.186	1036	3E.4	SF26	D.230	1044
1E.6	8"Fres	D.140	1065	2E.6	8"Fres	D.188	1069	3E.6	8"Fres	D.232	1073
1E.10	8"Fres	D.144	1066	2E.10	8"Fres	D.192	1070	3E.10	8"Fres	D.236	1074
1E.15	8"Fres	D.148	1067	2E.15	8"Fres	D.196	1071	3E.15	8"Fres	D.240	1075
1E.19	8"Fres	D.152	1068	2E.19	8"Fres	D.200	1072	3E.19	8"Fres	D.244	1076
1E.21	SF26	D.155	1029	2E.21	SF26	D.203	1037	3E.21	SF26	D.247	1045
1E.22	SF26	D.156	1030	2E.22	SF26	D.204	1038	3E.22	SF26	D.248	1046
1E.23	SF36	D.157	1031	2E.23	SF36	D.205	1039	3E.23	SF36	D.249	1047
1E.24	SF36	D.158	1032	2E.24	SF36	D.206	1040	3E.24	SF36	D.250	1048
4th Electric				5th Electric				6th Electric			
4E.1	SF36	D.271	1049					5E.1	SF36	D.295	1057
4E.2	SF36	D.272	1050					5E.2	SF36	D.296	1058
4E.3	SF26	D.273	1051					5E.3	SF26	D.297	1059
4E.4	SF26	D.274	1052					5E.4	SF26	D.298	1060
4E.6	8"Fres	D.276	1077					5E.6	8"Fres	D.300	1081
4E.10	8"Fres	D.280	1078					5E.10	8"Fres	D.304	1082
4E.15	8"Fres	D.284	1079					5E.15	8"Fres	D.308	1083
4E.19	8"Fres	D.288	1080					5E.19	8"Fres	D.312	1084
4E.21	SF26	D.291	1053					5E.21	SF26	D.315	1061
4E.22	SF26	D.292	1054					5E.22	SF26	D.316	1062
4E.23	SF36	D.293	1055					5E.23	SF36	D.317	1063
4E.24	SF36	D.294	1056					5E.24	SF36	D.318	1064
S.L. Booms				S.R. Booms				7th Electric			
SLB1.1	SF26	D.367	1085					SRB1.1	SF26	D.380	1093
SLB1.2	SF26	D.369	1086					SRB1.2	SF26	D.381	1094
SLB1.3	SF36	D.367	1085					SRB1.3	SF36	D.380	1093
SLB1.4	SF36	D.369	1086					SRB1.4	SF36	D.381	1094
SLB2.1	SF26	D.391	1087					SRB2.1	SF26	D.415	1095
SLB2.2	SF26	D.392	1088					SRB2.2	SF26	D.416	1096
SLB2.3	SF36	D.391	1087					SRB2.3	SF36	D.415	1095
SLB2.4	SF36	D.392	1088					SRB2.4	SF36	D.416	1096
SLB3.1	SF26	D.397	1089					SRB3.1	SF26	D.421	1097
SLB3.2	SF26	D.398	1090					SRB3.2	SF26	D.422	1098
SLB3.3	SF36	D.397	1089					SRB3.3	SF36	D.421	1097
SLB3.4	SF36	D.398	1090					SRB3.4	SF36	D.422	1098
SLB4.1	SF26	D.403	1091					SRB4.1	SF26	D.427	1099
SLB4.2	SF26	D.404	1092					SRB4.2	SF26	D.428	1100
SLB4.3	SF36	D.403	1091					SRB4.3	SF36	D.427	1099
SLB4.4	SF36	D.404	1092					SRB4.4	SF36	D.428	1100

**WORTHAM THEATER CENTER
ALICE AND ROY CULLEN THEATER
SOUND INVENTORY**

SOUND SYSTEM (Cullen)	MONITOR MIX SYSTEM (Cullen / Brown)																										
<p>The main PA system consists of a center cluster, left & right, upper & lower stacks, front fills and sub woofers. The system was designed to be highly flexible to accommodate a variety of events from corporate meetings to classical ensembles to jazz concerts.</p>	<p>This system is configured to support most events in need of an onstage monitor mix. The console is capable of mixing up to forty microphones independently to eight separate outputs. The freq. response of each output can be precisely adjusted. Use of this system requires an additional WCOC approved sound technician.</p>																										
<p>CONSOLE</p> <p>1 Yamaha CL5 w/ 40 channels (Focusrite Rednet MP8R)</p> <p>Main L/R STACKS</p> <p>4 Meyer CQ-1 Powered Speakers (2 per side)</p> <p>CENTER CLUSTER</p> <p>8 JBL Low Frequency Woofers</p> <p>2 JBL Horns/Drivers</p> <p>4 Renkus Heinz Horns/Drivers</p> <p>SUB WOOFERS</p> <p>2 EAW SB528Z</p> <p>FRONT FILLS</p> <p>3 EAW JF80z</p> <p>STAGE MONITORS</p> <p>see Monitor Mix</p> <p>HEAD END</p> <p>1 BSS Soundweb 806 Blu w/ Dante Interface</p> <p>1 Tascam DV-RA1000HD Hard Disc Recorder</p> <p>2 Denon DN-700C CD player</p> <p>1 Denon DN-600F CD player</p> <p>2 Windows PC's running Dante Virtual Soundcard</p> <p>1 Denon DBT-1713UD Universal A/V Player</p>	<p>CONSOLE</p> <p>1 Yamaha PM5D 48/4 Channel (non-recall head amps)</p> <p>SUPPORT EQUIPMENT</p> <p>8 QSC PLX-2502 / 3602 Power Amplifiers</p> <p>MONITORS</p> <p>8 Martin Audio LE100 12" wedges</p> <p>6 Martin Audio LE200 15" wedges</p> <p>2 Sidefills (EAW KF400 stacked on EAW SB528zRi Subs)</p> <p>IEM System (PSM1000)</p> <p>2 Shure P15T Dual Transmitters</p> <p>4 Shure P10R Recievers</p> <p>***** No Molds *****</p>																										
<p>STAGE MANAGER CONSOLE (Cullen)</p> <p>The stage manager's console is equipped with a variety of independent systems that allow voice & visual communication throughout the backstage & control room areas to stagehands, artists, musicians, wardrobe personnel, etc. It is the responsibility of the User Group to provide a stage manager for their event.</p> <p>Clearcom Intercom System (20+ stations)</p> <p>Tempest 2.4GHz Wireless Comm System (6 packs)</p> <p>Conductor & FOH Closed Circuit Video Monitors</p> <p>Dressing Room Paging System</p> <p>Live Show Feed System</p> <p>Cue Light System</p>	<p>MICROPHONES & DI's (Cullen / Brown)</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 50%;">4 / 5 Crown PCC-160</td> <td style="width: 50%;">10 / 0 Shure SM-57</td> </tr> <tr> <td>1 / 0 AKG D112</td> <td>4 / 0 Shure Beta 57</td> </tr> <tr> <td>1 / 0 Sennheiser e902</td> <td>7 / 4 Shure SM-58</td> </tr> <tr> <td>1 / 0 Shure Beta 91</td> <td>3 / 0 Shure Beta 58</td> </tr> <tr> <td>5 / 0 Beyer M88T</td> <td>2 / 0 Electro-Voice RE-20</td> </tr> <tr> <td>4 / 0 Sennheiser 421</td> <td>8 / 0 Shure KSM 137</td> </tr> <tr> <td>2 / 0 Sennheiser e906</td> <td>2 / 0 Shure Beta 87 A</td> </tr> <tr> <td>4 / 0 Sennheiser 835</td> <td>0 / 7 Shure SM-81</td> </tr> <tr> <td>5 / 0 AKG C-414B P48 (3 gold face, 2 silver face)</td> <td></td> </tr> <tr> <td>2 / 0 AKG C747 Mini Shotgun Condensors</td> <td></td> </tr> <tr> <td>11 / 4 BSS Audio AR133 Active DI Box</td> <td></td> </tr> <tr> <td>2 / 0 Countryman Type 85 Active DI Box</td> <td></td> </tr> <tr> <td colspan="2">6 / 0 Countryman E6 Headworn Lav (beige)</td></tr> </tbody> </table> <p>WIRELESS MICROPHONE SYSTEM (Cullen)</p> <p>This system is a "state-of-the-art" system with flexible frequency ranges which can be quickly adjusted in the event of interference problems. Use of any portion of this system requires an additional WCOC approved sound technician.</p> <p>10 Shure UR4D Dual Channel Receivers (20 chan. total)</p> <p>10 Shure UR1 BodyPack Transmitters</p> <p>10 DPA 4061 Lavalier Microphones</p> <p>10 Shure UR2/SM58 Handheld Microphones</p> <p>5 Beta 87A Capsules for above Handhelds</p> <p>2 Shure UA845-US Antenna Distribution Systems</p> <p>RF mics can be monitored at FOH PC, using Shure Wireless Workbench 6.</p>	4 / 5 Crown PCC-160	10 / 0 Shure SM-57	1 / 0 AKG D112	4 / 0 Shure Beta 57	1 / 0 Sennheiser e902	7 / 4 Shure SM-58	1 / 0 Shure Beta 91	3 / 0 Shure Beta 58	5 / 0 Beyer M88T	2 / 0 Electro-Voice RE-20	4 / 0 Sennheiser 421	8 / 0 Shure KSM 137	2 / 0 Sennheiser e906	2 / 0 Shure Beta 87 A	4 / 0 Sennheiser 835	0 / 7 Shure SM-81	5 / 0 AKG C-414B P48 (3 gold face, 2 silver face)		2 / 0 AKG C747 Mini Shotgun Condensors		11 / 4 BSS Audio AR133 Active DI Box		2 / 0 Countryman Type 85 Active DI Box		6 / 0 Countryman E6 Headworn Lav (beige)	
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The sound equipment listed above, specifically the Monitor Mix & Microphone Inventory, may not be available depending on their use in the Brown Theater. Due to the close proximity of the Brown Theater, Cullen Theater and the Grand Foyer, a sound decibel level of 87 DB is strictly enforced by WCOC and by City of Houston Ordinance.

**WORTHAM THEATER CENTER
LILLIE AND ROY CULLEN THEATER**

MISC. EQUIPMENT LIST

Equipment	Manufacturer	Model No / Size	Qty
Grand Piano - 6' 3" (w/ bench)	Yamaha	C-3	1
Orchestra Shell	Wenger	see dwg detail	1
Orchestra Shell (portable walls)	Custom	18' h x 5' 6" w	6
Musician Chair (black)	Wenger	0920000	40
Music Stand	Wenger	037B001	40
Music Stand Light	Wenger	1090001	40
Pit Snakes	Custom	20'	4
String Bass Chair (black)	Wenger	157C077	2
Cello Chair (black)	Wenger	0940000	4
Conductors Base Podium - 6" H	Wenger	158D002	1
Conductors Upper Podium - 6" H	Wenger	158D001	1
Conductors Stand	Wenger	159C002	1
Conductors Chair (gray)	Wenger	157C077	1
Bar Stool (no back)	Misc	Black	2
Chorale Riser (3-step)	Wenger - Tourmaster	024F806	9
Chorale Riser (4th-step)	Wenger - Tourmaster	024F707	9
Chorale Riser (back rail)	Wenger - Tourmaster	024F778	9
Staging (4' 0" x 4' 0")	Wenger - Versalite	Gray Carpet	8
Staging (4' 0" x 2' 0")	Wenger - Versalite	Gray Carpet	4
Staging (4' 0" x 8' 0") - City Rental	Wenger - Versalite	Gray Carpet	18
Staging (8" / 16" leg sets) - City Rental	Wenger - Versalite	Leg Sets (six)	9 / 10
Staging (24" / 32" leg sets) - City Rental	Wenger - Versalite	Leg Sets (six)	12 / 8
Staging (8", 16", 24", 32" skirting) - City Rental	Wenger - Versalite	Black & Maroon	na
Staging (Step units)	Wenger - Versalite	16" h (2-step)	2
Quick Change Booth (2-fold)	Custom	7' 0" h x 8' 0" w x 5' 0" d	4
Portable Dressing Table (w/ mirror)	Custom	na	1
Folding Tables	na	3' x 6'	6
Designer's FOH Table	Custom	2' 6" d x 8' 0" w	1
Electric Man-Lift (w/ outriggers)	Upright	40' h	1
Step Ladder	Werner	12' h	1
Step Ladder	Werner	10' h	1
Step Ladder	Werner	8' h	1
Step Ladder	Werner	6' h	2
Marley Dance Floor (full stage)	Rosco	Black/Gray	na
Expandble Safety Gate	VersaGuard	3' h x 10' w	2
Dollies	Custom	24" x 32"	6
Castered Platform (black)	Custom	6" h x 4' 0" d x 4' 0" w	6
Speaker Podium - City Rental (Signage - 21" w)	DaLite	48" h(adj) x 25" w x 22" d	1
Viper NT Fog Machine	Look Solutions	na	1

The quantities listed above are true to the best of our knowledge!

WORTHAM THEATER CENTER
LILLIE AND ROY CULLEN THEATER

Lineset #	Position	Description	Lineset #	Position	Description
FW #1	-- 13' 6"	Forestage Winch #1	43	23' 3"	
FW #2	-- 10' 9"	Forestage Winch #2	44	23' 9"	Split Black
FW #3	-- 5' 0"	Forestage Winch #3	45	24' 3"	
	0' 0"	Plaster Line	46	24' 9"	
	0' 5"	Fire Curtain (U.S. Side)	47	25' 3"	
	0' 9 1/2"	Smoke Pocket	48	25' 9"	
	1' 3"	House Curtain	49	26' 3"	#4 Electric
1	2' 3'	Teaser	50	26' 9"	overhead monitors
2	2' 9'		51	27' 3"	
3	3' 2 1/2"	Hard Legs	52	27' 9"	#4a Electric (Cyclights)
4	3' 9'		53	28' 3"	
5	4' 2 1/2"	#1 Electric	54	28' 9"	
6	4' 9"		55	29' 3"	#4 Border (9'h x 52'w)
7	5' 3"	#1a Electric (VL2500's)	56	29' 9"	#4 Legs (12'w x 32'h)
8	5' 9 1/2"		57	30' 3"	
MS#4	6' 0"	shell pickup	58	30' 9"	
9	6' 3"		59	31' 3"	
10	6' 9"		60	31' 9"	
11	7' 3"		61	32' 3"	
12	7' 9"		62	32' 9"	
13	8' 3"	#1 Border (9'h x 52'w)	63	33' 3"	
14	8' 9"	#1 Legs (12'w x 32'h)	64	33' 9"	
15	9' 3"		65	34' 3"	#5 Electric
16	9' 9"	surtitle screen	66	34' 9"	
17	10' 3"	#2 Electric	67	35' 3"	
18	10' 9"	overhead monitors	68	35' 9"	#5 Border (9'h x 52'w)
19	11' 3"		69	36' 3"	#5 Legs (12'w x 32'h)
20	11' 9"	#2a Electric	70	36' 9"	Blackout Drop (32'h x 52'w)
21	12' 3"		71	37' 3"	White Scrim
22	12' 9"		72	37' 9"	Black Scrim
23	13' 3"		73	38' 3"	Projection Screen (White)
24	13' 9"		74	38' 9"	Projection Screen (Gray)
MS#5	14' 0"	shell pickup	75	39' 3"	#6 Electric (Cyclights)
25	14' 3"	#2 Border (9'h x 52'w)	76	39' 9"	
26	14' 9"	#2 Legs (12'w x 32'h)	77	40' 3"	
27	15' 3"	Split Black	78	40' 9"	
28	15' 9"	Small Projection Screen	79	41' 3"	
29	16' 3"		80	41' 9"	
30	16' 9"		81	42' 3"	#6 Border (9'h x 52'w)
31	17' 3"	#3 Electric	82	42' 9"	#6 Legs (12'w x 32'h)
32	17' 9"		83	43' 3"	
33	18' 3"		84	43' 9"	traveler storage
34	18' 9"	#3a Electric (VL2500's)	85	44' 3"	
35	19' 3"		86	44' 9"	tab storage
36	19' 9"		87	45' 3"	Muslin Bounce (32'h x 52'w)
37	20' 3"		88	45' 9"	Blackout Drop (32'h x 52'w)
38	20' 9"		89	46' 3"	
39	21' 3"		90	46' 9"	
40	21' 9"	#3 Border (9'h x 52'w)	91	47' 3"	batten storage
41	22' 3"	#3 Legs (12'w x 32'h)	92	47' 9"	
42	23' 3"		93	48' 3"	#7 Electric (blank raceway)