

SPACE COOLING LOAD AND AIR FLOW CIRCULATION RATE

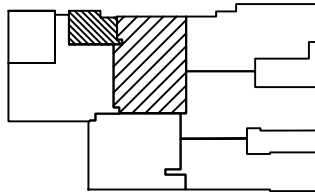


LITTLE ROCK A.F.B.
ARKANSAS

SPACE NAME	COOLING SENSIBLE (MBH)	CEILING HEIGHT	FLOOR AREA (SQ. FT.)	ROOM VOLUME (CU. FT.)	SUPPLY (CFM)	RETURN (CFM)	EXHAUST (CFM)	SPACE (SQ. FT.)	MIN. AIR CHANGES PER HOUR REQ'D	DESIGN AIR CHANGES PER HOUR	REMARKS
NEW ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Digital X-Ray, C166	9.3	9'-6"	340	3230	435	435	-	1.28	6	8.1	
NEW ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Digital X-Ray, C167	9.3	9'-6"	340	3230	435	410	-	1.28	6	8.1	See Note 1
NEW ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Digital Mamm, C159	9.1	10'-0"	275	2750	425	425	-	1.55	6	9.3	
NEW ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Ultra Sound, C162	7.1	10'-0"	220	2200	335	335	-	1.52	6	9.1	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
NCOKC Office, C182	4.2	8'-0"	240	1920	200	200	-	0.82	4	6.2	
Provider Office, C179	5.5	8'-0"	295	2360	255	255	-	0.86	4	6.5	
Tech Office, C180	2.7	8'-0"	135	1080	125	125	-	0.92	4	6.9	
Corridor C170 & C177	3.4	9'-0"	520	4680	310	420	-	0.6	4	4.0	See Note 3
Dressing Rm, C161	0.9	8'-0"	45	360	40	-	-	0.89	4	6.7	See Note 2
Dressing Rm, C164	0.9	8'-0"	45	360	40	-	-	0.89	4	6.7	See Note 2
Dressing Rm, C165	0.9	8'-0"	45	360	40	-	-	0.89	4	6.7	See Note 2
Dressing Rm, C166	0.9	8'-0"	45	360	40	-	-	0.89	4	6.7	See Note 2
Storage, C163	0.2	8'-0"	15	120	-	25	-	1.67	4	12.5	See Note 4
Toilet, C169	-	8'-0"	45	360	50	-	75	1.67	10	12.5	See Note 7
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Office, C136	4.4	8'-0"	280	2240	210	210	-	0.75	4	5.6	
Office, C143	3.0	8'-0"	175	1400	140	140	-	0.8	4	6.0	
Office, C146	3.4	8'-0"	200	1600	155	155	-	0.77	4	5.8	
Corridor, C158	2.9	9'-0"	335	3015	200	200	-	0.6	4	4.0	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Conference, C127	12.3	8'-6"	350	2975	620	620	-	1.77	6	12.5	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Waiting, C119	5.0	8'-0"	245	1960	230	230	-	0.94	6	7.0	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Office, C111	2.8	8'-0"	155	1240	130	130	-	0.84	4	6.3	
Office, C116	2.7	8'-0"	140	1120	125	125	-	0.9	4	6.7	
Office, C115	2.7	8'-0"	140	1120	125	125	-	0.9	4	6.7	
Office, C114	2.7	8'-0"	140	1120	125	125	-	0.9	4	6.7	
Office, C113	2.5	8'-0"	105	840	115	115	-	1.1	4	8.2	
Corridor, C112A & C112D	5.0	8'-0"	720	5760	385	385	-	0.52	4	4.0	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Storage, C125	0.7	8'-0"	70	560	40	40	-	0.57	4	4.3	
Office, C123	2.4	8'-0"	85	680	100	100	-	1.17	4	8.8	
Office, C124	2.6	8'-0"	115	920	120	120	-	1.04	4	7.8	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Office, C101	2.7	8'-0"	90	720	125	125	-	1.4	4	10.4	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Office, C102	3.3	8'-0"	110	880	155	155	-	1.41	4	10.6	
Office, C103	3.2	8'-0"	90	720	150	150	-	1.67	4	12.5	
Office, C104	3.3	8'-0"	110	720	155	155	-	1.41	4	10.6	

SPACE NAME	COOLING SENSIBLE (MBH)	CEILING HEIGHT	FLOOR AREA (SQ. FT.)	ROOM VOLUME (CU. FT.)	SUPPLY (CFM)	RETURN (CFM)	EXHAUST (CFM)	SPACE (SQ. FT.)	MIN. AIR CHANGES PER HOUR REQ'D	DESIGN AIR CHANGES PER HOUR	REMARKS
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Office, C105	3.4	9'-0"/10'-6"	135	1260	160	160	-	1.18	4	7.6	
Office, C106	3.4	9'-0"/10'-6"	135	1260	160	160	-	1.18	4	7.6	
Office, C107	3.4	9'-0"/10'-6"	135	1260	160	160	-	1.18	4	7.6	
Office, C108	3.4	9'-0"/10'-6"	135	1260	160	160	-	1.18	4	7.6	
Office, C109	3.4	9'-0"/10'-6"	135	1260	160	160	-	1.18	4	7.6	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Office, C130	2.6	8'-0"	120	960	120	120	-	1	4	7.5	
Office, C131	2.0	8'-0"	70	560	90	90	-	1.28	4	9.6	
Office, C132	2.6	8'-0"	125	1000	120	120	-	0.96	4	7.2	
Breakroom, C135A	4.3	8'-0"	110	880	200	200	-	1.82	6	13.6	
Corridor, C133	2.4	9'-0"	230	2070	140	90	-	0.61	4	4.0	See note 12
Toilet, C134	-	8'-0"	100	800	150	-	200	2	10	15.0	See note 13
Toilet, C168	-	8'-0"	45	360	50	-	75	1.67	10	12.5	See Note 6
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Waiting Area, C156	5.6	8'-0"	345	2760	275	225	-	0.8	6	6.0	See note 14
Toilet, C147	-	8'-0"	45	360	50	-	75	1.67	10	12.5	See note 15
Toilet, C148	-	8'-0"	45	360	50	-	75	1.67	10	12.5	See note 15
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Office, C110	3.0	8'-0"	135	1080	140	140	-	1.04	4	7.8	
EXISTING ZONE MIXING DAMPERS - DUAL DUCT (AHU-S3)											
Records, C178	3.3	3'-3"	3'-3"	3'-3"	3'-3"	3'-3"	3'-3"	3'-3"	3'-3"	3'-3"	
Corridor, C126	3.4	9'-0"	600	5400	360	310	-	0.6	4	4.0	See Note 5
Reception/Waiting C181	11.5	9'-6"	510	4845	540	540	-	1.06	6	6.7	
ZONE 5 OF AHU-4 (SPU-4)											
Office, A110	15.0	8'-0"	450	3600	700	700	-	1.55	4	11.7	
Office, A111	4.0	8'-0"	160	1280	185	185	-	1.15	4	8.7	
Office, A119	2.8	8'-0"	110	880	130	130	-	1.18	4	8.7	
Storage, A120	0.5	8'-0"	30	240	25	-	-	0.84	4	6.2	See Note 8
ZONE 6 OF AHU-4 (SPU-4)											
Office, A109A	2.4	8'-0"	70	560	110	110	-	1.57	4	11.8	
Office, A109B	2.4	8'-0"	70	560	110	110	-	1.57	4	11.8	
Office, A109C	2.4	8'-0"	70	560	110	110	-	1.57	4	11.8	
Office, A109D	2.4	8'-0"	75	600	110	110	-	1.47	4	11.0	
Office, A117	2.5	8'-0"	105	840	120	120	-	1.14	4	8.6	
Office, A118	2.5	8'-0"	105	840	120	120	-	1.14	4	8.6	
Corridor, A116	1.1	8'-0"	150	1200	80	105	-	0.53	4	4.0	See Note 9
Office Space A104	10.5	8'-0"	585	4680	490	490	-	0.84	4	6.3	
Reception/Waiting A113	5.2	8'-0"	250	2000	240	240	-	0.96	6	7.2	
Supply, A112	0.4	8'-0"	35	280	-	20	-	0.57	4	4.3	See Note 10
Corridor, A109	1.4	8'-0"	155	1240	85	65	-	0.55	4	4.1	See Note 11
1. 25 CFM Transfer to Toilet C168 through 1-inch undercut of door											
2. 40 CFM Transfer to corridor C177 through 1-inch undercut of door											
3. 160 CFM Transfer from dressing rooms and 50 CFM transfer to toilet C169 and storage C163											
4. 25 CFM Transfer from corridor C177 through 1 inch undercut of door											
5. 50 CFM Transfer to janitor closet C128 through 1 inch undercut of door											
6. 25 CFM Transfer from digital X-Ray C167 through 1 inch undercut of door											
7. 25 CFM Transfer from corridor C177 through 1 inch undercut of door											
8. 25 CFM Transfer to corridor A116 through 1 inch undercut of door											
9. 25 CFM Transfer from storage room A120 through 1 inch undercut of door											
10. 20 CFM Transfer from corridor A109 thru 1 inch undercut of door											
11. 20 CFM Transfer to supply room A112 through 1 inch undercut of door											
12. 50 CFM Transfer to toilet C134 through 1 inch undercut of door.											
13. 50 CFM Transfer from corridor C133 through 1 inch undercut of door.											
14. 50 CFM Transfer to toilets C147 and C148 through 1 inch undercut of door.											
15. 25 CFM Transfer from waiting area C156 through 1 Inch undercut of door.											

KEYPLAN
N.T.S.



PROJECT TITLE
REPAIR MEDICAL CENTER PH 3
LITTLE ROCK AFB, ARKANSAS

SHEET TITLE
SPACE COOLING LOAD AND
AIR FLOW CIRCULATION RATE

DRAWN BY RJR	LEAD DESIGNER AM
TECH REVIEWER AM	PROJECT NUMBER NKAK 06-8001
DESIGNED BY OD	SHEET M0.01
DATE 8-11-06	
SCALE N/A	20 of 37