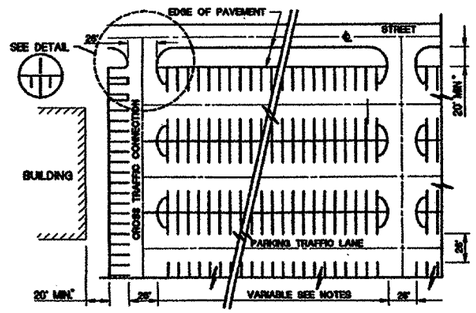
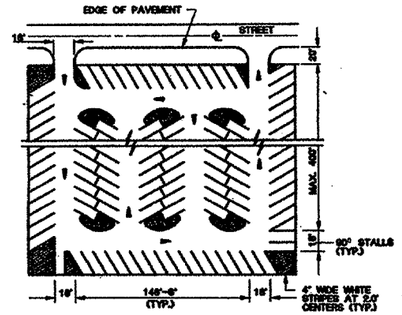


90° OFF-STREET PARKING

SCALE: 1" = 50'

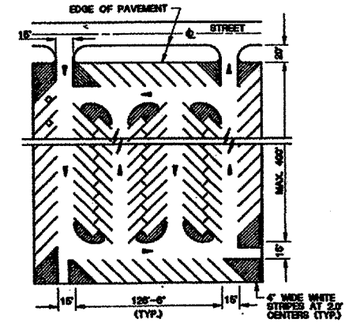
* DEPENDENT ON SITE RESTRICTIONS



60°/75° OFF-STREET PARKING

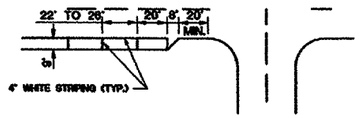
SCALE: 1" = 50'

NOTE: 75° PARKING IS SIMILAR



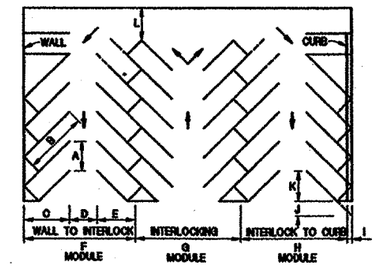
45° OFF-STREET PARKING

SCALE: 1" = 50'



ON-STREET PARKING

NOTE: PARKING STALL SHOULD BE 2' CLEAR FROM EDGE OF TRAVEL WAY



PARKING LAYOUT DIMENSION (IN FT) FOR 9 FT X 18.5 FT STALLS AT VARIOUS ANGLES

DIMENSION	ON DIAGRAM	ANGLE 45°	60°	75°	90°
STALL WIDTH, PARALLEL TO AISLE*	A	12.7	10.4	9.3	9.0
STALL LENGTH OF LINE	B	27.5	23.7	20.9	18.5
STALL DEPTH TO WALL	C	19.5	20.5	20.0	18.5
AISLE WIDTH BETWEEN STALL LINES	D	12.0	16.0	23.0	26.0
STALL DEPTH, INTERLOCK	E	16.5	18.5	18.5	18.5
MODULE, WALL TO INTERLOCK	F	48.0	55.0	62.0	63.0
MODULE, INTERLOCKING	G	45.0	53.0	61.0	63.0
MODULE, INTERLOCK TO CURB FACE	H	46.0	53.2	59.5	60.5
BUMPER OVERHANG (TYPICAL)	I	2.0	2.3	2.5	2.5
OFFSET	J	0.4	2.6	0.6	0.0
SETBACK	K	19.1	9.3	4.8	0.0
CROSS AISLE, ONE-WAY	L	14.0	14.0	14.0	14.0
CROSS AISLE, TWO-WAY	–	24.0	24.0	24.0	24.0

STALL LAYOUT ELEMENTS

NOTE: CROSS AISLE WIDTH CAN BE USED IF NO PARKING EXISTS ON BOTH SIDES FO AISLE.

OFF - STREET PARKING

1. OFF-STREET SHALL BE DESIGNED FOR EITHER 90°, 75°, 60°, OR 45°, DEPENDENT UPON AVAILABLE SPACE AND PARKING DURATION.
2. IN GENERAL, THE BEST USE OF AVAILABLE SPACE IS MADE UNDER THE FOLLOWING CRITERIA:
   A. USE RECTANGULAR AREA WHEN POSSIBLE.
   B. MAKE THE LONG SIDES OF THE PARKING AREA PARALLEL.
   C. DESIGN TRAFFIC LANES TO SERVE TWO ROWS OF PARKING STALLS.
   D. LINE THE PERIMETER OF AREA WITH PARKING STALLS.
3. USE 350 SQUARE FEET PER CAR (INCLUDES TOTAL SPACE REQUIREMENT FOR LANES, TURNS, AND STALLS). IN PRELIMINARY SPACE REQUIREMENT CALCULATIONS, INDIVIDUAL STALLS SHALL BE A MINIMUM OF 9 FEET X 18.5 FEET. SPECIAL SECTIONS SHALL BE MARKED-OFF FOR SMALL (COMPACT) CAR SO AS TO BE BETTER UTILIZE THE ENTIRE AREA.

90° PARKING

1. NORMALLY, THE USE OF 90° PARKING IS RECOMMENDED FOR EMPLOYEE PARKING LOT WITH ALL DAY PARKING. THE WIDE SPACING OF ENTRANCES REDUCES TRAFFIC INTERFERENCE ON THE ACCESS ROAD.
2. WHEN PARKING AREAS ARE OF EXCEPTIONAL LENGTH, CROSS TRAFFIC CONNECTIONS SHOULD BE PROVIDE ON THE BASIS OF ONE FOR ABOUT 30 VEHICLES SPACES. HOWEVER, FOR THE SMALLER ODD SHAPED LOTS THIS LIMIT MAY VARY SOMEWHAT TO PROVIDE FOR THE MOST EFFICIENT ARRANGEMENT.

75°, 60°, OR 45° PARKING

1. WHERE A SLOW RATE OF TURNOVER IS EXPECTED, 90° PARKING IS PARTICULARLY DESIRABLE. WHERE A FAST RATE OF TURNOVER IS EXPECTED OR WHERE SITE LIMITATIONS DICTATE, 75°, 60°, OR 45° PARKING WITH ONE-WAY AISLES MAY BE USED. HOWEVER, THE ADVANTAGE OF EASY USAGE OF 75°, 60° OR 45° PARKING IS OFTEN OFFSET BY THE INCONVENIENCE OF ONE-WAY AISLES AND ROUNDABOUT CIRCULATION. FOR THE SMALLER SHAPED LOTS THIS LIMIT MAY VARY SOMEWHAT TO PROVIDE FOR THE MOST EFFICIENT ARRANGEMENT.
2. 60° PARKING IS PREFERRED FOR NEX AND COMMISSARY STORE PARKING AREAS.

ON - STREET PARKING

1. ON STREET PARKING SHALL BE PARALLEL. DIAGONAL OR PERPENDICULAR PARKING IS NOT RECOMMENDED.
2. EXCEPT FOR RESIDENTIAL AREAS, ON-STREET PARKING IS HIGHLY DISCOURAGED DUE TO GREATER ACCIDENT POTENTIAL.

COMPACT CAR STALLS

1. RECOMMENDED PARKING DIMENSIONS FOR COMPACT CARS (15 FEET LONG) DIFFER FROM RECOMMENDATIONS FOR FULL SIZE CARS. RECOMMENDED STALL LENGTHS AND WIDTHS ARE 15 AND 7.5 FEET, RESPECTIVELY. IF A NUMBER OF THESE SMALL SPACES ARE TO BE INCLUDED IN A PARKING AREA, THEY SHOULD BE PLACED TOGETHER IN A PRIME LOCATION TO ENCOURAGE USAGE. IF THESE SPACES ARE NOT CONVENIENT, DRIVERS WITH SMALL CARS WILL PARK IN THE STANDARD SPACES.

40% TO 60% OF SPACES SHOULD BE SET ASIDE FOR COMPACT CARS.

PARKING DIMENSIONS FOR COMPACT-SIZE VEHICLES (16-FT LENGTH)*

PARKING ANGLE (DEG)	STALL WIDTH	AISLE LENGTH/STALL	DEPTH OF STALLS AT RIGHT ANGLE TO AISLE	AISLE WIDTH	WALL-TO-WALL MODULE
45	7.5	10.5	16.0	11.0	43.0
60	7.5	8.7	16.7	14.0	47.4
75	7.5	7.9	16.5	17.4	50.0
90	7.5	7.5	15.0	20.0	50.0

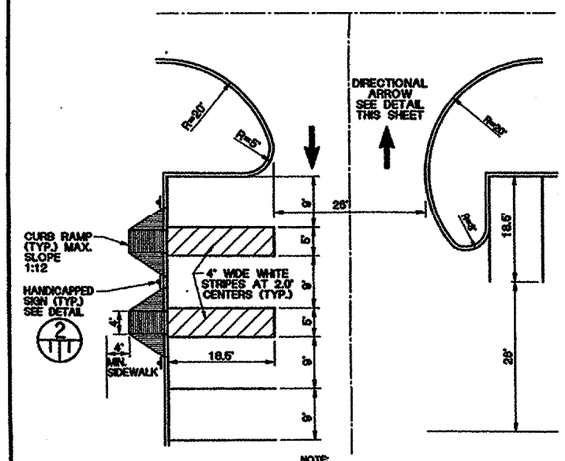
*THESE MEASUREMENT MAY BE INADEQUATE FOR AVERAGE AMERICAN COMPACTS. EACH STALL DEPTH SHOULD BE INCREASED 1 FT (2 FT TOTAL FOR THE MODULE) TO ACCOMMODATE THE USUAL RANGE OF COMPACT SIZES

OPTION

1. DOUBLE LINES (SEE DETAIL 3) MAY BE USED FOR HEAVY TRAFFIC PARKING AREAS, SUCH AS NEX'S, SHOPPING CENTERS, VISITOR'S AREAS, ETC.

PHYSICAL SECURITY

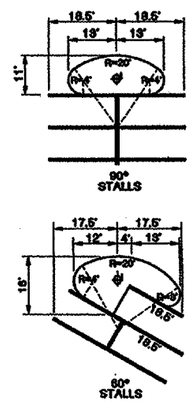
OPNAVINST 5530.14B PROHIBITS PARKING OF PRIVATELY OWNED VEHICLES WITHIN 15 FEET OF ANY BUILDING.



NOTE:
1. HANDICAP ACCESS AISLE SHOULD BE APART OF AN ACCESSIBLE ROUTE TO BUILDING/FACILITY ENTRANCE.
2. ADJACENT HANDICAP SPACES CAN HAVE A COMMON ACCESS AISLE.
3. DETAIL FOR 75°, 60°, AND 45° STALLS IS SIMILAR.

DETAIL 1

SCALE: 1" = 10'

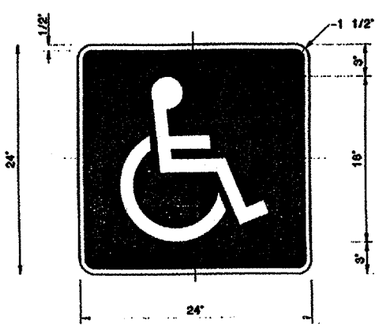


END-ISLANDS FOR 9-FT STALLS

SCALE: 1" = 10'

TYPICAL PARKING DIMENSIONS* (FT)						
	STALL WIDTH PARALLEL TO AISLE	STALL DEPTH TO WALL	STALL DEPTH TO INTERLOCK	AISLE+ WIDTH	MODULES‡ WALL TO WALL	MODULES‡ INTERLOCK TO INTERLOCK
45 DEG						
8.5 STALL	12.0	19.5	18.5	13	52	49
9.0 STALL	12.7	19.5	18.5	12	51	48
9.5 STALL	13.4	19.5	18.5	11	50	44
60 DEG						
8.5 STALL	9.8	20.5	18.5	18	59	55
9.0 STALL	10.4	20.5	18.5	16	57	53
9.5 STALL	11.0	20.5	18.5	15	56	52
75 DEG						
8.5 STALL	8.3	20.0	19.0	25	65	63
9.0 STALL	8.8	20.0	19.0	23	63	61
9.5 STALL	9.3	20.2	19.0	22	62	60
90 DEG						
8.5 STALL	8.5	18.5	18.5	28	65	65
9.0 STALL	9.0	18.5	18.5	26	63	63
9.5 STALL	9.5	18.5	18.5	25	62	62

*8.5' AND 9.5' STALL WIDTHS MAY BE USED DEPENDING ON LOCAL VEHICLE CHARACTERISTICS.
+MEASURES BETWEEN ENDS OF STALL LINES.
‡ROUNDED TO NEAREST FOOT
#FOR BACK-IN PARKING, AISLE WIDTH MAY BE REDUCED 4.0 FT.



COLORS

LEGEND - WHITE (REFL)

BACKGROUND - BLUE

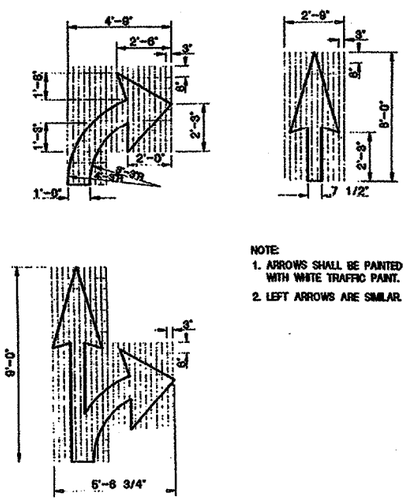
NOTE: SIGN SHALL BE MOUNTED WITH AT LEAST 4'-0" CLEAR TO THE SIDEWALK, 2'-0" FROM CURB.

HANDICAPPED SIGN 2

N.T.S.

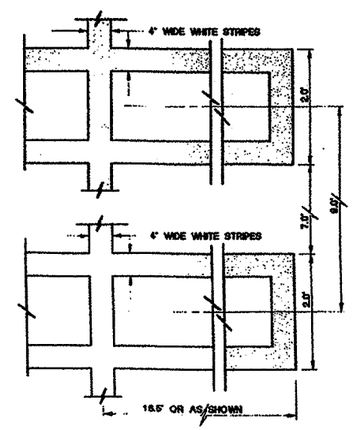
TOTAL PARKING	HANDICAP SPACES
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1000	2% TOTAL
1000+	20 PLUS 1 FOR EACH 100 OVER 1000

DO NOT COUNT AS TOTAL PARKING:
1. PARKING FOR ABLE-BODIED MILITARY PERSONNEL.
2. OFFICIAL GOVERNMENT AND DELIVERY TRUCK SPACES.



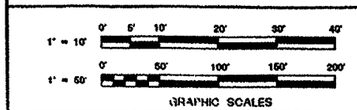
NOTE:
1. ARROWS SHALL BE PAINTED WITH WHITE TRAFFIC PAINT.
2. LEFT ARROWS ARE SIMILAR.

PAVEMENT MARKING ARROWS



DOUBLELINE DETAIL 3

N.T.S.



GRAPHIC SCALES

THIS DRAWING SUPERCEDES NAVFAC DWG. NO. 1404370

SYMBOL	DESCRIPTION	APPROVED	DATE

REVISIONS

NAVAL FACILITIES ENGINEERING COMMAND
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20390

DEFINITIVE DRAWING

PARKING AREA CRITERIA FOR VEHICLES

SIZE	CODE IDENT NO	DRAWING NUMBER
F	80091	1404837
SCALE AS SHOWN		
FACILITIES 852-10		SHEET 1 OF 1