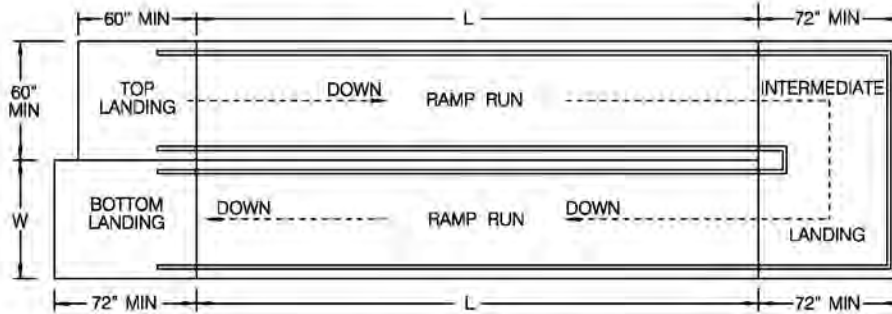
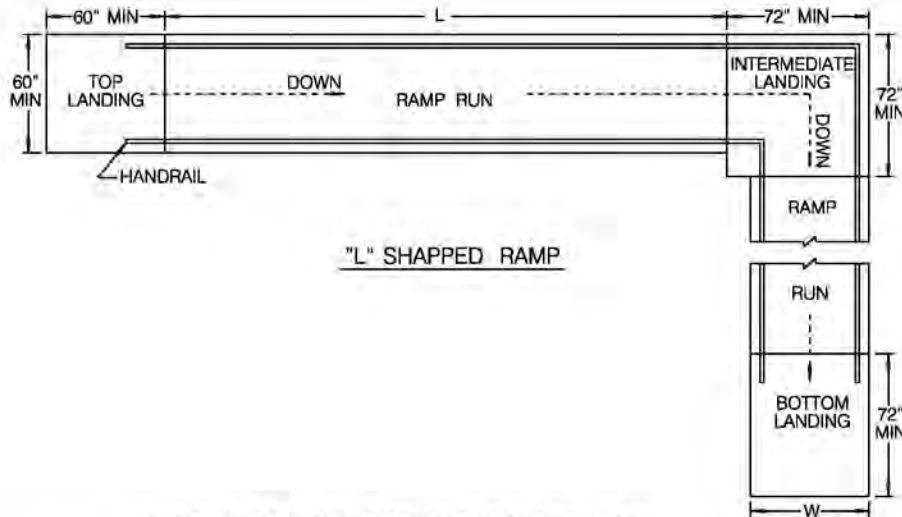


STRAIGHT RUN RAMP



"U" SHAPED RAMP



"L" SHAPED RAMP

LENGTH OF EACH SEGMENT OF RAMP RUN

MAX SLOPE	MAXIMUM LENGTH OF EACH RAMP SEGMENT (L)	MAXIMUM RISE BETWEEN LANDINGS
1:15 (6.67%)	37.5'	30"
1:16 (6.25%)	40'	30"
1:17 (5.88%)	42.5'	30"
1:18 (5.55%)	45'	30"
1:19 (5.26%)	47.5'	30"
1:20 (5%)	50'	30"

NOTES:

1. WIDTH OF BOTTOM LANDING (W) TO EXIT SHALL BE AS WIDE AS THE RAMP IF NO CHANGE OF DIRECTION. 60" WIDE MINIMUM, IF CHANGE OF DIRECTION OF 30 DEGREES OR MORE.
2. NO WATER PONDING ALLOWED ON LANDINGS.

REVISION	BY	APPROVED	DATE
ORIGINAL	SM	A. OSKOUI	1203
UPDATE	FC	A. OSKOUI	1206
UPDATE	KA	J. NAGELVOORT	01/12

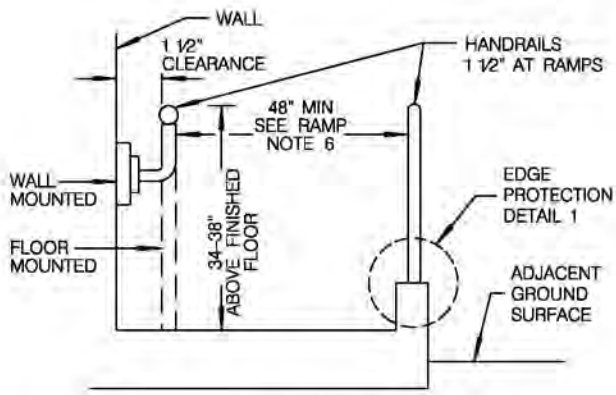
CITY OF SAN DIEGO - STANDARD DRAWING

**PEDESTRIAN RAMP AND  
PROTECTIVE RAILING**

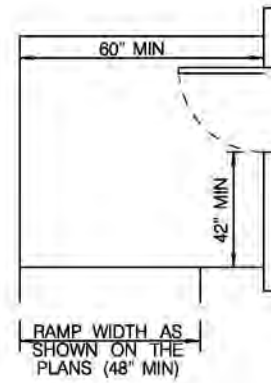
RECOMMENDED BY THE CITY OF SAN DIEGO  
STANDARDS COMMITTEE

*[Signature]* 1/31/2012  
COORDINATOR R.C.E. 85271 DATE

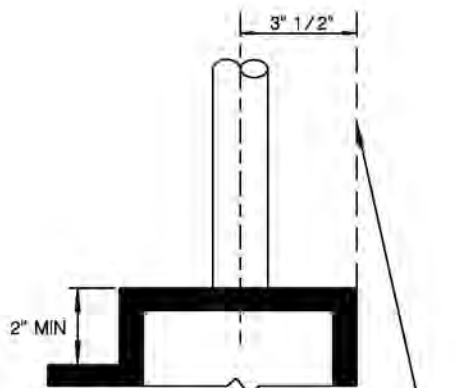
DRAWING  
NUMBER **SDM-115**



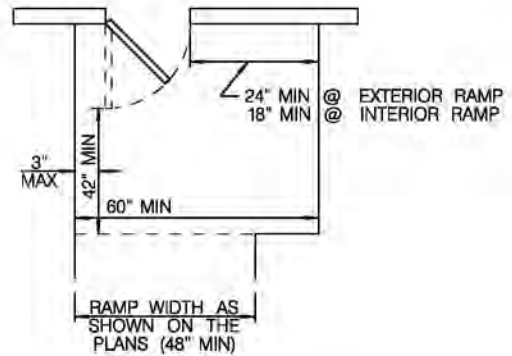
SECTION B-B



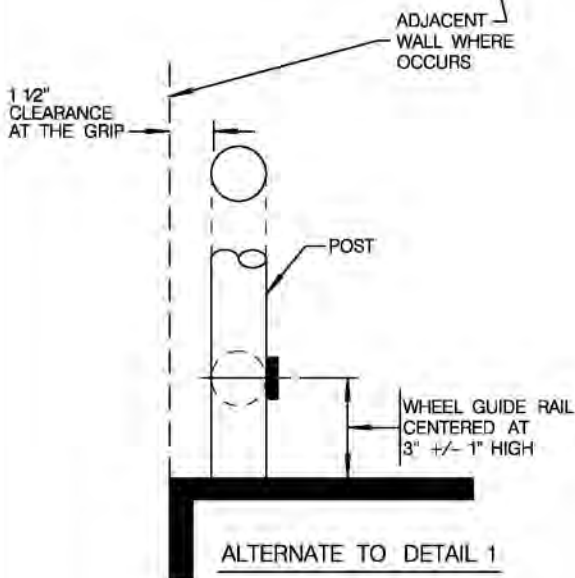
SIDE APPROACH LANDING



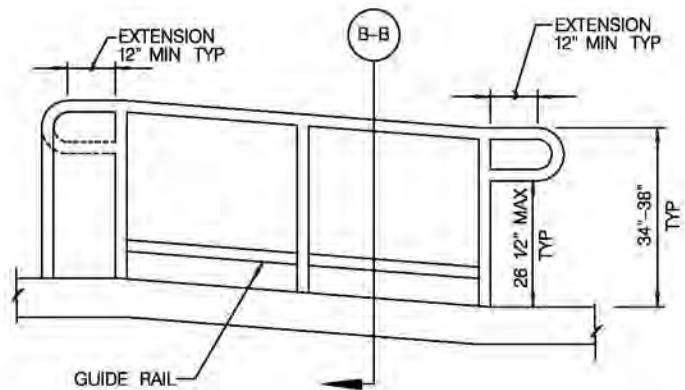
DETAIL 1



FRONT APPROACH LANDING



ALTERNATE TO DETAIL 1



SECTION A-A

REVISION	BY	APPROVED	DATE
ORIGINAL	SM	A. OSKOUI	1203
UPDATE	FC	A. OSKOUI	1206
UPDATE	KA	J. NAGELVOORT	01/12

CITY OF SAN DIEGO - STANDARD DRAWING

**PEDESTRIAN RAMP AND PROTECTIVE RAILING**

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

*H. Hadji* 1/31/2012  
COORDINATOR R.C.E. 85271 DATE

DRAWING NUMBER **SDM-115**

**RAMP:**

1. ANY WALKING SURFACE THAT IS PART OF AN ACCESSIBLE ROUTE WITH THE SLOPE GREATER THAN 5% SHALL BE CONSIDERED A PEDESTRIAN RAMP AND MUST COMPLY WITH THE PEDESTRIAN RAMP STANDARDS.
2. THE LEAST POSSIBLE SLOPE SHALL BE USED WITHOUT EXCEEDING 6.67%, PER CITY OF SAN DIEGO ACCESS MEMO.
3. CROSS SLOPE SHALL NOT EXCEED 1.5%.
4. LANDINGS SHALL HAVE 1.5% SLOPE IN BOTH DIRECTIONS.
5. WALKING SURFACE MUST BE STABLE, FIRM AND SLIP RESISTANT. CONCRETE SHALL HAVE A MEDIUM BROOM TRANSVERSE FINISH.

**HANDRAIL:**

1. HANDRAILS ARE REQUIRED ON BOTH SIDES OF A PEDESTRIAN RAMP.

**EXCEPTIONS:**

- a. RAMPS AT EXTERIOR DOOR LANDINGS THAT RISE LESS THAN 6" OR HAVE LESS THAN 72" LENGTH. HOWEVER LEVEL LANDINGS SHALL BE PROVIDED AT THE TOP AND BOTTOM.
  - b. RAMPS IMMEDIATELY ADJACENT TO A SEATING IN ASSEMBLY AREAS.
2. HANDRAILS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE RAMP RUN PLUS THE EXTENSION.
  3. INSIDE HANDRAILS AT "U" SHAPED AND "L" SHAPED RAMPS SHALL BE CONTINUOUS.
  4. HANDRAILS SHALL EXTEND 12" MINIMUM BEYOND THE TOP, INTERMEDIATE AND BOTTOM OF EACH RAMP SEGMENT IN THE DIRECTION OF THE RAMP RUN, THE HANDRAIL EXTENSION SHALL BE PARALLEL TO THE LANDING SURFACE.
  5. HANDRAIL EXTENSION SHALL NOT EXTEND INTO THE REQUIRED WIDTH OF AN ADJACENT ROUTE OF TRAVEL. IN EXISTING FACILITIES WHERE THE ENCROACHMENT OF THE EXTENSION IN THE DIRECTION OF THE RAMP CREATES A HAZARD, THE EXTENSION SHALL BE BENT 90 DEGREES TO THE RUN OF THE RAMP.
  6. END OF HANDRAIL EXTENSION SHALL BE TURNED TO THE WALL, FLOOR OR POST.
  7. END OF HANDRAIL EXTENSION SHALL BE TURNED TO THE FLOOR WHEN EXTENSION IS PROTRUDING PERPENDICULAR INTO PATH OF TRAVEL.
  8. TOP GRIPING SURFACE OF THE HANDRAIL SHALL BE UNIFORM IN HEIGHT. THE GRIPPING SURFACE SHALL BE CONTINUOUS AND SMOOTH (NO SHARP CORNERS).
  9. THE GRIPING PORTION SHALL BE 1-1/4" TO 1-1/2" IN CROSS SECTIONAL NOMINAL DIMENSION OR SHAPED WITH EQUIVALENT GRIPING SURFACE. DESIGN AND SHOP DRAWINGS SHALL BE APPROVED BY THE CITY ENGINEER ACCESS COMPLIANCE OFFICER PRIOR TO FABRICATION.
  10. ADJACENT WALL OR OTHER SURFACES SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENT (SMOOTH FINISH).
  11. A GUARDRAIL 42" ABOVE FINISHED FLOOR SHALL BE INSTALLED ALONG OPEN EDGES OF THE RAMP AND LANDINGS THAT ARE 30" OR MORE IN HEIGHT FROM THE ADJACENT GROUND SURFACE AND THE RAMP IS NOT BOUNDED BY A WALL OR FENCE. SEE SDM-118.
  12. PROVIDE A CONTINUOUS GUIDE CURB OR GUIDE RAIL IF POSTS ARE INSTALLED ON THE RAMP SURFACE OR IF THE FINISH SURFACE IS  $\geq$  4" HIGHER THAN THE ADJACENT GROUND SURFACE.
  13. FOR HANDRAIL AND GUARDRAIL MATERIAL, FINISHES AND ADDITIONAL DETAILS, SEE RELATED DETAIL DRAWINGS.

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO - STANDARD DRAWING	<b>PEDESTRIAN RAMP AND PROTECTIVE RAILING</b>	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE		
ORIGINAL	SM	A. OSKOUI	1203			<i>A. Hadji</i>	1/31/2012	
UPDATE	FC	A. OSKOUI	1206			COORDINATOR	R.C.E. 65271	DATE
UPDATE	KA	J. NAGELVOORT	01/12			DRAWING NUMBER	<b>SDM-115</b>	