CITY OF MISSION VIEJO
ACCESS RAMPS
CASE A

TABLE Y

<table>
<thead>
<tr>
<th>CF</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'</td>
<td>7.90'</td>
</tr>
<tr>
<td>8'</td>
<td>10.53'</td>
</tr>
</tbody>
</table>

Y = CURB FACE (FT.) / 6.33%

* "Y" SHALL NOT EXCEED 10.53', UNLESS APPROVED BY THE CITY ENGINEER
SINGLE RAMP

RADIUS: 525'
SEE PROFILE SHEET 6 OF 8

EXPANSION JOINT
SEE STD. NO. 321

WEAKENED PLANE JOINT
SEE NOTE 7

12' WIDE BORDER
SEE NOTE 3 AND 7

SEE TABLE "X" ON SHEET 6

CROSSWALK

CURB AND GUTTER DETAILS PER
STD. NO. 316

CONSTRUCT RETAINING CURB UNLESS
OTHERWISE SPECIFIED

4' MIN. LANDING

TRUNCATED DOME CONCRETE TILE DETAIL
STD. 322, SHEET 7 OF 8

RAMP CONSTRUCTION SHALL
INCLUDE CURB AND GUTTER
AND SIDEWALK FROM BCR TO ECR

SECTION A - A
SEE SHEET 8 OF 8 FOR NOTES.

CITY OF MISSION VIEJO
ACCESS RAMPS CASE B
STANDARD PLAN NO. 322

APPROVED BY: CITY ENGINEER RCE 51160 DATE 08/07/19

SHT 2 OF 8
**DOUBLE RAMP**

RADIUS ≥ 35'

EXPANSION JOINT (SEE STD. NO. 321)

WHEN SIDEWALK IS AT THE RIGHT-OF-WAY OR WHEN MEANDERING

EXPANSION JOINT (SEE STD. NO. 321)

CROSSWALK A 10' MIN. 12'

WEAKENED PLANE JOINT (SEE NOTE 7)

RAMP CONSTRUCTION SHALL INCLUDE CURB AND GUTTER AND SIDEWALK FROM BCR TO ECR

TRUNCATED DOME CONCRETE TILE DETAIL

STD. 322, SHEET 7 OF 8

SECTION A-A

Y (SEE TABLE Y BELOW)

SEE SHEET 8 OF 8 FOR NOTES.

<table>
<thead>
<tr>
<th>CF</th>
<th>Y</th>
<th>CURB FACE (FT.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'</td>
<td>7.90'</td>
<td>( Y = \frac{6.33}{2%} )</td>
</tr>
<tr>
<td>8'</td>
<td>10.53'</td>
<td></td>
</tr>
</tbody>
</table>

* Y SHALL NOT EXCEED 10.53', UNLESS APPROVED BY THE CITY ENGINEER

** ELIMINATE ONE RAMP IF NO FUTURE PATH OF TRAVEL EXIST

CITY OF MISSION VIEJO

ACCESS RAMPS

CASE C

STANDARD PLAN NO.

322

APPROVED BY: CITY ENGINEER RCE 51160

08/07/19

SHT 3 OF 8
**DOUBLE RAMP**

* Radius ≥ 35’
  * See Profile Sheet 6 of 8

**EXPANSION JOINT**

* See Std. No. 321

**CROSSWALK**

* A

**RADIUS = 25’ OR 35’**

* Δ

**WEAKENED PLANE JOINT**

* (See Note 7)

**CURB AND GUTTER DETAILS PER**

* Std. No. 216

**TRUNCATED DOME CONCRETE TILE DETAIL**

* Std. 322, Sheet 7 of 8

SEE NOTE 5

**SECTION A-A**

* See Sheet 8 of 8 for Notes.

**ELIMINATE ONE RAMP IF NO FUTURE PATH OF TRAVEL**

**CITY OF MISSION VIEJO**

ACCESS RAMPS

CASE D

STANDARD PLAN NO.

322

08/07/19

APPROVED BY: CITY ENGINEER RCE 51160 DATE SHT 4 OF 8
Y (SEE TABLE Y BELOW) 4' MIN.

SEE NOTE 5 2' 2' MAX.
FLUSH (SEE NOTE 4)
2% PVMT

SECTION A-A

SEE SHEET 8 OF 8 FOR NOTES.

Y = CURB FACE (FT.)
6.33%

TABLE Y

<table>
<thead>
<tr>
<th>CF</th>
<th>Ymax</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'</td>
<td>7.90'</td>
</tr>
<tr>
<td>8'</td>
<td>10.53'</td>
</tr>
</tbody>
</table>

* 'Y' SHALL NOT EXCEED 10.53', UNLESS APPROVED BY THE CITY ENGINEER.

CITY OF MISSION VIEJO

ACCESS RAMPS
CASE E & CASE F

STANDARD PLAN NO.
322

APPROVED BY:  CITY ENGINEER  RCE 51160  DATE
08/07/19
SHT 5 OF 8
### Table - X

**TO CALCULATE "X" DIMENSION**

\[
X = \frac{\text{CURBFACE (FT)}}{\text{SIDE SLOPE} + \text{TC GRADE}} \quad \frac{X}{\text{SIDE SLOPE} - \text{TC GRADE}}
\]

*Engineer to show \( X \) and \( X \) on Improvement Plans*

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**CITY OF MISSION VIEJO**  
**CURB RAMP**

---

**Standard Plan No.**

**322**

**Approved By:**  
City Engineer RCE 51160

**Date:** 08/07/19

**Sht 6 of 8**
CONTRAST BORDER WIDTH ≥ 4" TYP. (1" MIN. PER CBC)
LIGHT-ON-DARK OR DARK-ON-LIGHT

AT INTERIOR AND PERIMETER JOINTS
USE STABILIZED POLYMERIC BEDDING
SAND JOINT WIDTH < ½ "

LATEX THIN-SET MORTAR BED
PER MANUFACTURER’S RECOMMENDATIONS

4" CONCRETE
(SEE NOTE 8)

6" CLASS II BASE OR CAB BELOW CURB RAMP AREA
AND AS SUPPLEMENTED BY THE NOTES ON STD. 321

ISOMETRIC VIEW

CONCRETE TILE DETECTABLE WARNING DOMES
IN-LINE PATTERN

SECTION A - A

CITY OF MISSION VIEJO

TRUNCATED DOME
CONCRETE TILE DETAIL

STANDARD PLAN NO.
322

08/07/19

APPROVED BY: CITY ENGINEER RCE 51160
SHT 7 OF 8
CONSTRUCTION NOTES:

1. IF DISTANCE FROM CURB TO BACK OF SIDEWALK IS TOO SHORT TO ACCOMMODATE RAMP AND 4-FOOT LANDING, THEN USE THE CASE "B" RAMP.

2. IF SIDEWALK IS LESS THAN 6 FEET WIDE, THE FULL WIDTH OF THE SIDEWALK SHALL BE DEPRESSED AS SHOWN IN CASE B. MINIMUM SIDEWALK WIDTH IS 4 FEET FROM BACK OF CURB.

3. THE RAMP SHALL HAVE A 12-INCH-WIDE BORDER WITH GROOVES \( \frac{3}{4} \)" WIDE AND \( \frac{3}{4} \)" DEEP APPROXIMATELY \( \frac{3}{4} \)" ON CENTER. SEE GROOVING DETAIL ON SHEET 6 OF 8.

4. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.

5. MAXIMUM SLOPES OF ADJOINING GUTTERS: THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP AND CONTINUOUS PASSAGE TO THE CURB RAMP SHALL NOT EXCEED 5% WITHIN 4 FEET OF THE BOTTOM OF THE CURB RAMP.

6. RAMP SIDE SLOPE VARIES UNIFORMLY FROM A MAXIMUM OF UP TO 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP (EXCEPT IN CASE B).

7. CONSTRUCT EXPANSION JOINTS AT \( \frac{3}{4} \) AND \( \frac{3}{4} \) DELTAS WHEN RADIUS EQUALS 35 FEET, AT INSIDE EDGE OF GROOVED BORDER WHEN RADIUS EQUALS 25 FEET, AND RADIALY IF ANGLE POINT OCCURS.

8. CONCRETE SPECIFICATION PER CITY STANDARD 200 – CONCRETE SPECIFICATIONS.

DETECTABLE WARNING NOTES:

1. TRUNCATED DOMES SHALL BE WAUSAU TILE, TYPE 3, SERIES U4008 OR EQUAL, IN LINE, PRE-CAST CONCRETE TILES AND GROUTED IN PLACE. NO SURFACE APPLIED DOME MATS ARE ALLOWED UNLESS APPROVED BY CITY ENGINEER. USE STABILIZED POLYMERIC BEDDING SAND AT TRUNCATED DOME TILES AT INTERIOR AND PERIMETER JOINTS. JOINT WIDTH < \( \frac{3}{32} \)".

2. CURB RAMPS REQUIRE DETECTABLE WARNING DOMES FOR THE FULL WIDTH AND THREE (3) FEET IN DEPTH OF THE CURB RAMP SLOPE FROM THE CURB LINE WITHIN THE PUBLIC RIGHT-OF-WAY.

3. PRIVATE (ONSITE) TRUNCATED DOME INSTALLATION TO EXTEND FULL WIDTH AND DEPTH OF RAMP PER CALIFORNIA BUILDING CODE, EXCLUDING PRIVATELY FUNDED SINGLE-FAMILY RESIDENCES.

4. THREE RUNNING FEET OF TRUNCATED DOMES AT FLUSH CURB INSTALLATIONS ARE REQUIRED FOR HAZARDOUS VEHICULAR AREAS. BOLLARDS ARE UTILIZED FOR PEDESTRIAN PROTECTION AT FLUSH CURB RETURNS OR EQUIVALENT FACILITIES AS APPROVED BY THE CITY ENGINEER.

5. SUBMIT CONCRETE DOME TILE AND POLYMERIC BEDDING SAND SPECIFICATIONS OR SAMPLES TO THE CITY FOR APPROVAL PRIOR TO INSTALLATION.

6. THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6' FROM THE CURB FACE.

7. MATCH ALL TILE CORNERS SUCH THAT ALL TRUNCATED DOME TILES ALIGN AND MAINTAIN DOME DIMENSIONAL SPACING. TRUNCATED DOME TILES SHALL BE ALIGNED PARALLEL WITH RAMP SLOPE DIRECTION. TRUNCATED DOME TILES CUT TO MATCH CURB RETURN RADIUS. GRIND EDGE TO AVOID TRIP HAZARD, AS REQUIRED.

CITY OF MISSION VIEJO
CURB RAMP
CONSTRUCTION NOTES

STANDARD PLAN NO.
322

APPROVED BY: CITY ENGINEER RCE 51160
08/07/19
DATE
SHT 8 OF 8