

DIAGRAMAS DE INTERACCION $P_u - M_u$

A. Columnas Armadura Bordes Extremos $f_y = 420 \text{ MPa}$ (1 - 16)

- | | | |
|------|------------------------|----------------|
| 1 . | $f_c = 20 \text{ MPa}$ | $\gamma = 0.8$ |
| 2 . | $f_c = 25 \text{ MPa}$ | $\gamma = 0.8$ |
| 3 . | $f_c = 30 \text{ MPa}$ | $\gamma = 0.8$ |
| 4 . | $f_c = 35 \text{ MPa}$ | $\gamma = 0.8$ |
| 5 . | $f_c = 40 \text{ MPa}$ | $\gamma = 0.8$ |
| 6 . | $f_c = 45 \text{ MPa}$ | $\gamma = 0.8$ |
| 7 . | $f_c = 50 \text{ MPa}$ | $\gamma = 0.8$ |
| 8 . | $f_c = 55 \text{ MPa}$ | $\gamma = 0.8$ |
| 9 . | $f_c = 20 \text{ MPa}$ | $\gamma = 0.9$ |
| 10 . | $f_c = 25 \text{ MPa}$ | $\gamma = 0.9$ |
| 11 . | $f_c = 30 \text{ MPa}$ | $\gamma = 0.9$ |
| 12 . | $f_c = 35 \text{ MPa}$ | $\gamma = 0.9$ |
| 13 . | $f_c = 40 \text{ MPa}$ | $\gamma = 0.9$ |
| 14 . | $f_c = 45 \text{ MPa}$ | $\gamma = 0.9$ |
| 15 . | $f_c = 50 \text{ MPa}$ | $\gamma = 0.9$ |
| 16 . | $f_c = 55 \text{ MPa}$ | $\gamma = 0.9$ |

B. Columnas Armadura Perimetral $f_y = 420 \text{ MPa}$ (17 - 32)

- | | | |
|------|------------------------|----------------|
| 17 . | $f_c = 20 \text{ MPa}$ | $\gamma = 0.8$ |
| 18 . | $f_c = 25 \text{ MPa}$ | $\gamma = 0.8$ |
| 19 . | $f_c = 30 \text{ MPa}$ | $\gamma = 0.8$ |
| 20 . | $f_c = 35 \text{ MPa}$ | $\gamma = 0.8$ |
| 21 . | $f_c = 40 \text{ MPa}$ | $\gamma = 0.8$ |
| 22 . | $f_c = 45 \text{ MPa}$ | $\gamma = 0.8$ |
| 23 . | $f_c = 50 \text{ MPa}$ | $\gamma = 0.8$ |
| 24 . | $f_c = 55 \text{ MPa}$ | $\gamma = 0.8$ |
| 25 . | $f_c = 20 \text{ MPa}$ | $\gamma = 0.9$ |
| 26 . | $f_c = 25 \text{ MPa}$ | $\gamma = 0.9$ |
| 27 . | $f_c = 30 \text{ MPa}$ | $\gamma = 0.9$ |
| 28 . | $f_c = 35 \text{ MPa}$ | $\gamma = 0.9$ |
| 29 . | $f_c = 40 \text{ MPa}$ | $\gamma = 0.9$ |
| 30 . | $f_c = 45 \text{ MPa}$ | $\gamma = 0.9$ |
| 31 . | $f_c = 50 \text{ MPa}$ | $\gamma = 0.9$ |
| 32 . | $f_c = 55 \text{ MPa}$ | $\gamma = 0.9$ |

C. Columnas Armadura Lateral $f_y = 420$ MPa (33 - 40)

- 33 . $f_c = 20$ MPa $\gamma = 0.8$
- 34 . $f_c = 25$ MPa $\gamma = 0.8$
- 35 . $f_c = 30$ MPa $\gamma = 0.8$
- 36 . $f_c = 35$ MPa $\gamma = 0.8$

- 37 . $f_c = 20$ MPa $\gamma = 0.9$
- 38 . $f_c = 25$ MPa $\gamma = 0.9$
- 39 . $f_c = 30$ MPa $\gamma = 0.9$
- 40 . $f_c = 35$ MPa $\gamma = 0.9$

D. Columnas Armadura Bordes Extremos $f_y = 280$ MPa (41 - 48)

- 41 . $f_c = 20$ MPa $\gamma = 0.8$
- 42 . $f_c = 25$ MPa $\gamma = 0.8$
- 43 . $f_c = 30$ MPa $\gamma = 0.8$
- 44 . $f_c = 35$ MPa $\gamma = 0.8$

- 45 . $f_c = 20$ MPa $\gamma = 0.9$
- 46 . $f_c = 25$ MPa $\gamma = 0.9$
- 47 . $f_c = 30$ MPa $\gamma = 0.9$
- 48 . $f_c = 35$ MPa $\gamma = 0.9$

E. Columnas Armadura Perimetral $f_y = 280$ MPa (49 - 56)

- 49 . $f_c = 20$ MPa $\gamma = 0.8$
- 50 . $f_c = 25$ MPa $\gamma = 0.8$
- 51 . $f_c = 30$ MPa $\gamma = 0.8$
- 52 . $f_c = 35$ MPa $\gamma = 0.8$

- 53 . $f_c = 20$ MPa $\gamma = 0.9$
- 54 . $f_c = 25$ MPa $\gamma = 0.9$
- 55 . $f_c = 30$ MPa $\gamma = 0.9$
- 56 . $f_c = 35$ MPa $\gamma = 0.9$

F. Columnas Armadura Lateral $f_y = 280$ MPa (57 - 64)

- 57 . $f_c = 20$ MPa $\gamma = 0.8$
- 58 . $f_c = 25$ MPa $\gamma = 0.8$
- 59 . $f_c = 30$ MPa $\gamma = 0.8$
- 60 . $f_c = 35$ MPa $\gamma = 0.8$

- 61 . $f_c = 20 \text{ MPa}$ $\gamma = 0.9$
- 62 . $f_c = 25 \text{ MPa}$ $\gamma = 0.9$
- 63 . $f_c = 30 \text{ MPa}$ $\gamma = 0.9$
- 64 . $f_c = 35 \text{ MPa}$ $\gamma = 0.9$

G. Muros Armadura Uniformemente Distribuida $f_y = 420 \text{ MPa}$ (65 - 72)

- 65 . $f_c = 20 \text{ MPa}$ $\gamma = 1.0$
- 66 . $f_c = 25 \text{ MPa}$ $\gamma = 1.0$
- 67 . $f_c = 30 \text{ MPa}$ $\gamma = 1.0$
- 68 . $f_c = 35 \text{ MPa}$ $\gamma = 1.0$
- 69 . $f_c = 40 \text{ MPa}$ $\gamma = 1.0$
- 70 . $f_c = 45 \text{ MPa}$ $\gamma = 1.0$
- 71 . $f_c = 50 \text{ MPa}$ $\gamma = 1.0$
- 72 . $f_c = 55 \text{ MPa}$ $\gamma = 1.0$

H. Muros Armadura Concentrada en Extremos

$r_w = 0.0025$ $f_y = 420 \text{ MPa}$ (73 - 80)

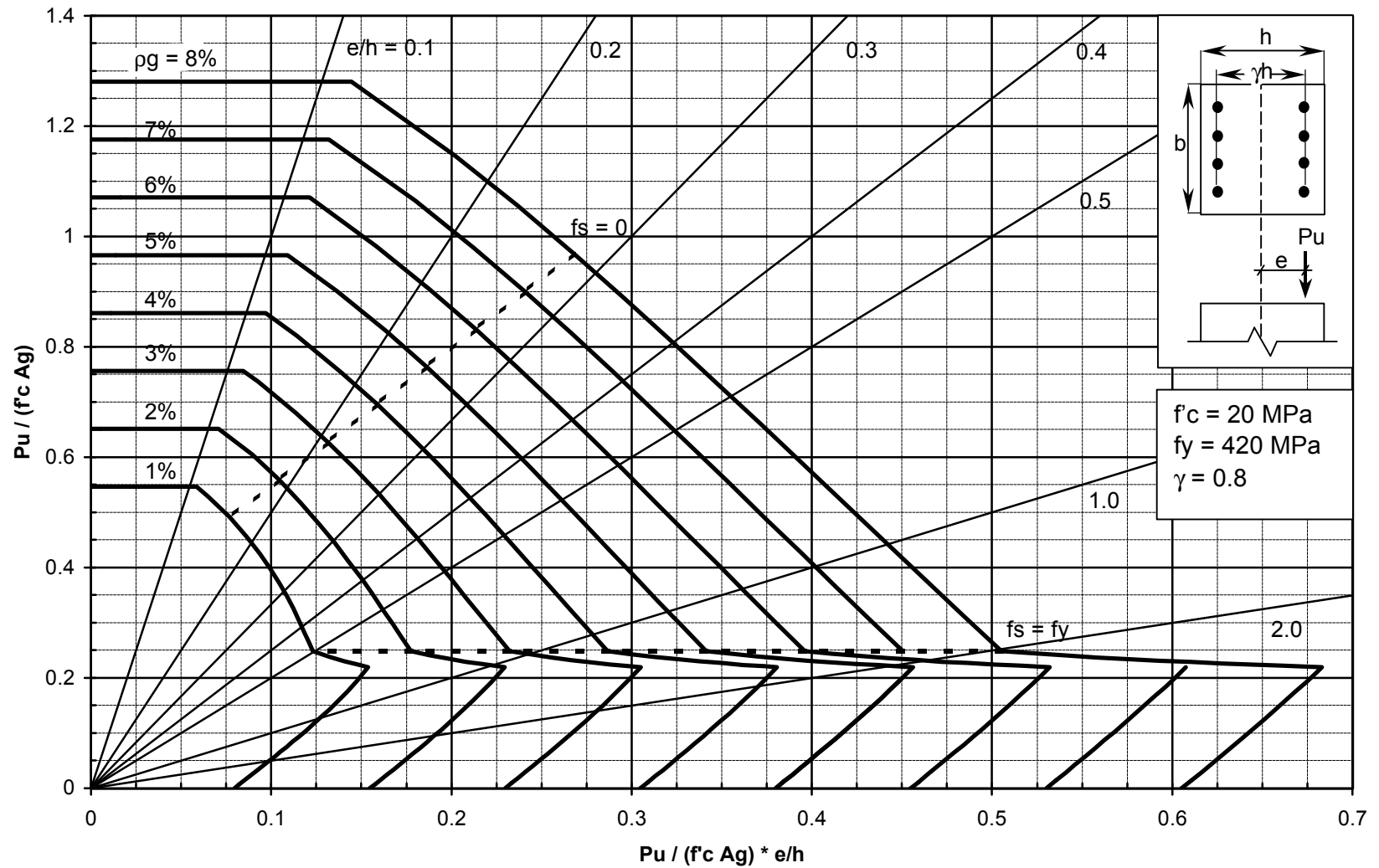
- 73 . $f_c = 20 \text{ MPa}$ $\gamma = 0.9$
- 74 . $f_c = 25 \text{ MPa}$ $\gamma = 0.9$
- 75 . $f_c = 30 \text{ MPa}$ $\gamma = 0.9$
- 76 . $f_c = 35 \text{ MPa}$ $\gamma = 0.9$
- 77 . $f_c = 40 \text{ MPa}$ $\gamma = 0.9$
- 78 . $f_c = 45 \text{ MPa}$ $\gamma = 0.9$
- 79 . $f_c = 50 \text{ MPa}$ $\gamma = 0.9$
- 80 . $f_c = 55 \text{ MPa}$ $\gamma = 0.9$

I. Muros Armadura Concentrada en Extremos

$r_w = 0.0050$ $f_y = 420 \text{ MPa}$ (81 - 88)

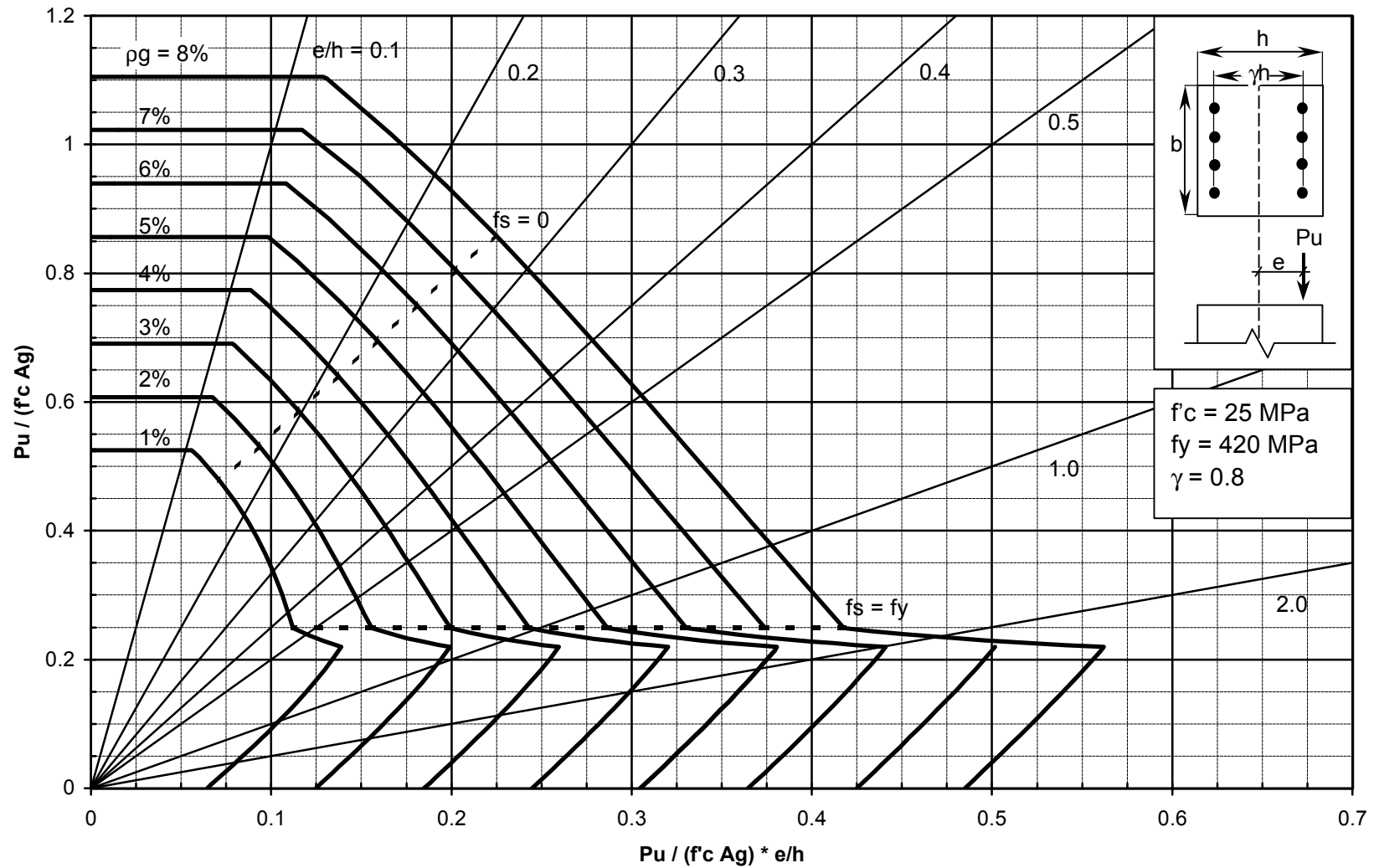
- 81 . $f_c = 20 \text{ MPa}$ $\gamma = 0.9$
- 82 . $f_c = 25 \text{ MPa}$ $\gamma = 0.9$
- 83 . $f_c = 30 \text{ MPa}$ $\gamma = 0.9$
- 84 . $f_c = 35 \text{ MPa}$ $\gamma = 0.9$
- 85 . $f_c = 40 \text{ MPa}$ $\gamma = 0.9$
- 86 . $f_c = 45 \text{ MPa}$ $\gamma = 0.9$
- 87 . $f_c = 50 \text{ MPa}$ $\gamma = 0.9$
- 88 . $f_c = 55 \text{ MPa}$ $\gamma = 0.9$

1- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos

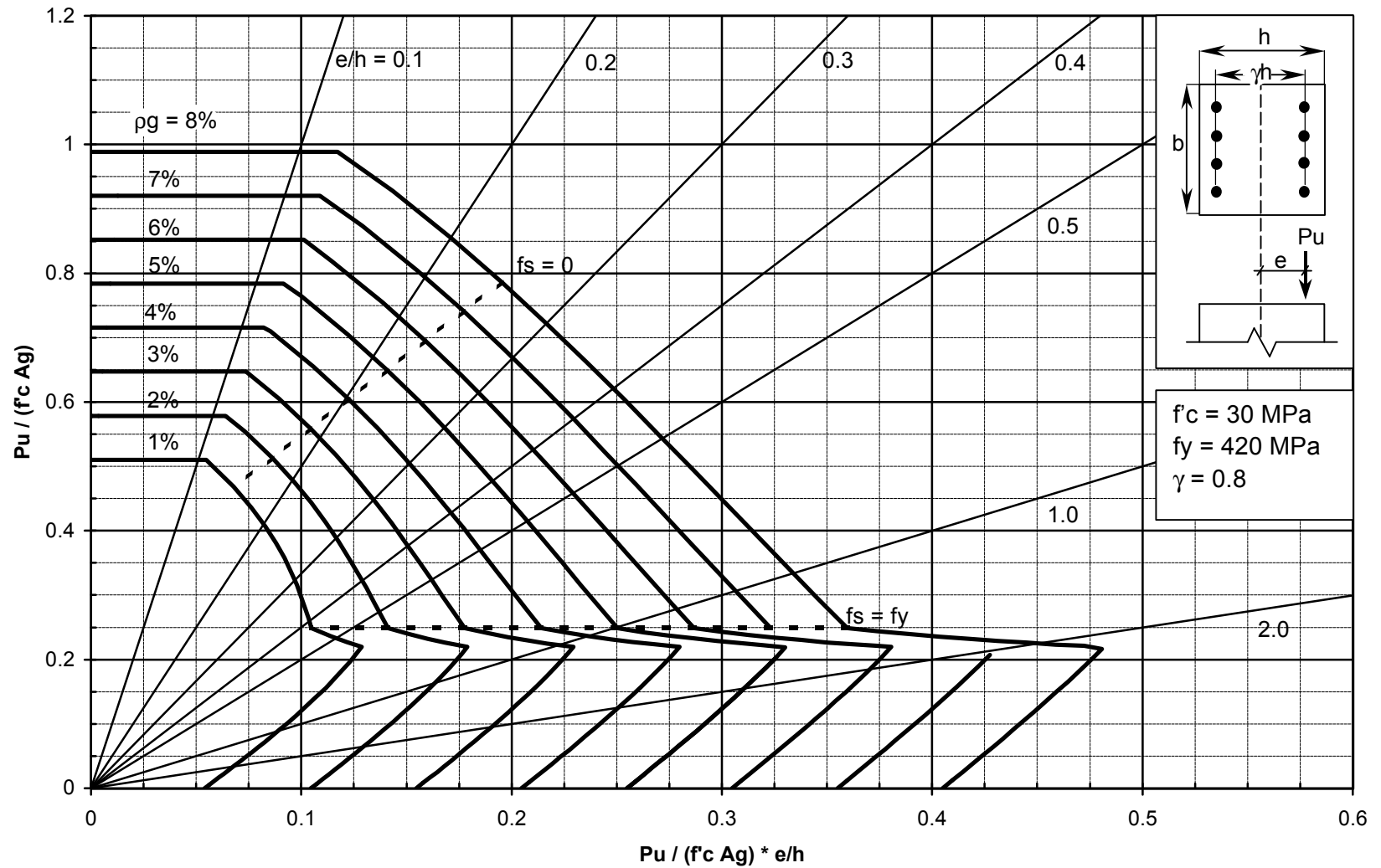


2- Diagrama de Interacción Pu - Mu

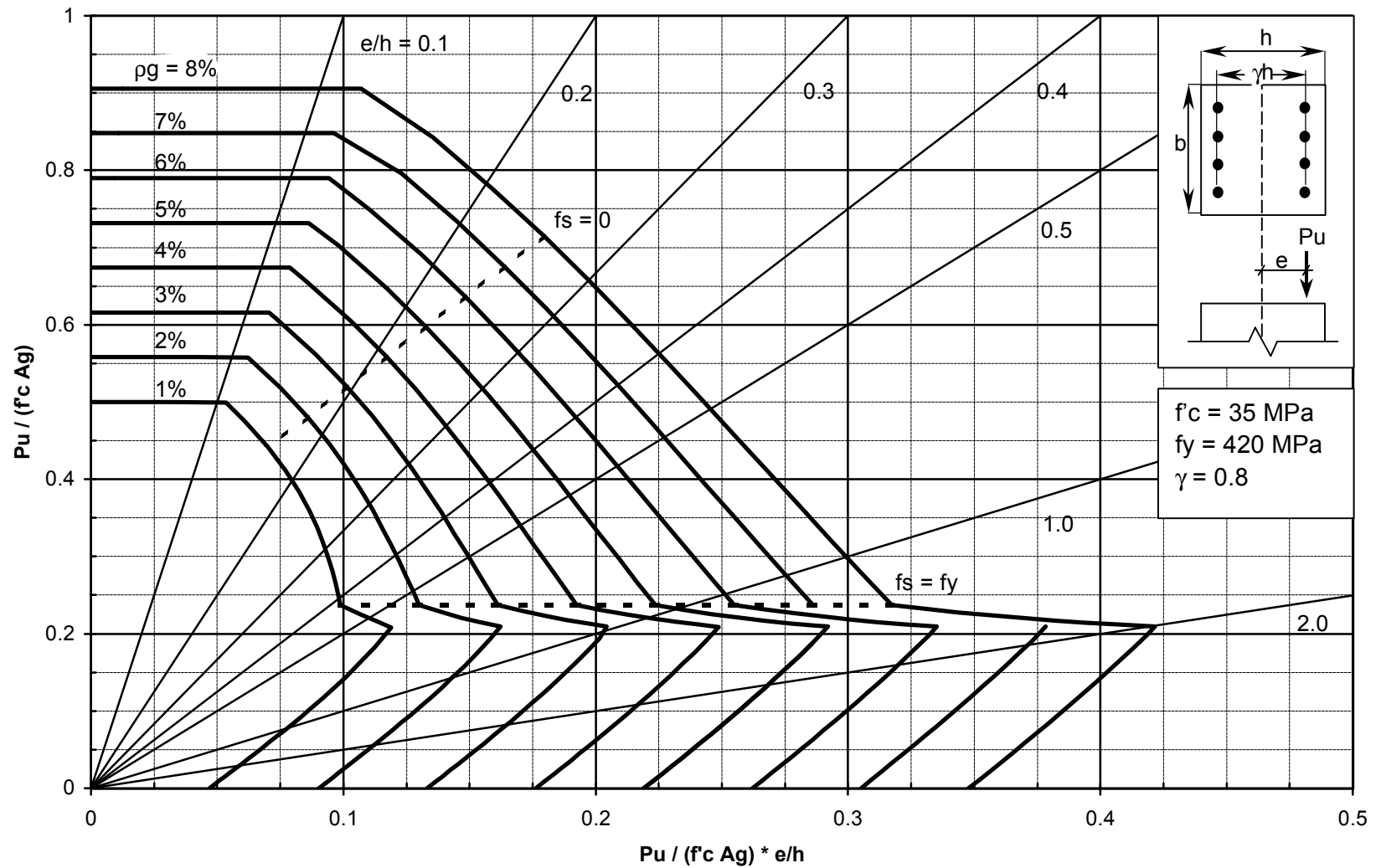
Columnas Armadura en Bordes Extremos



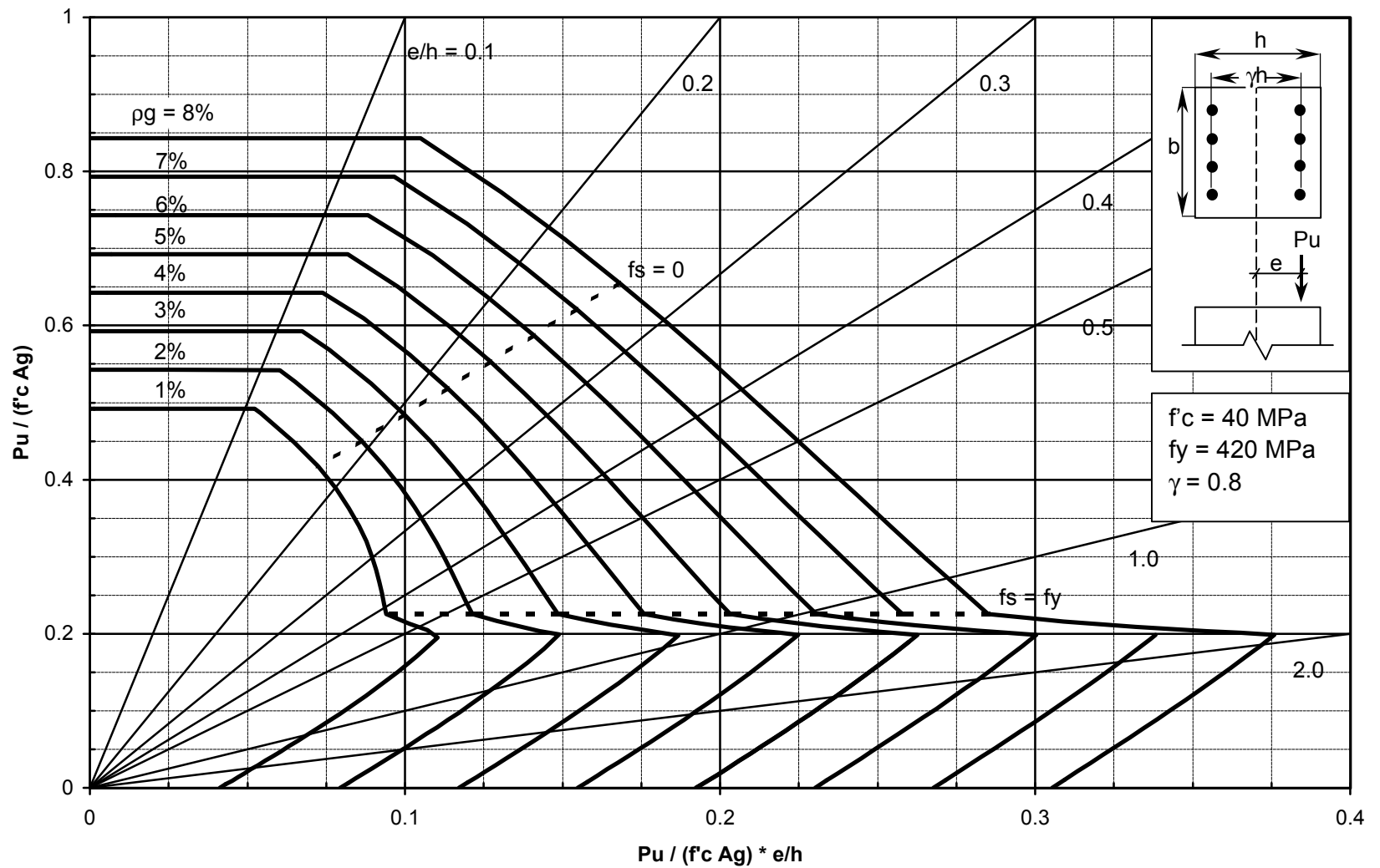
3- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



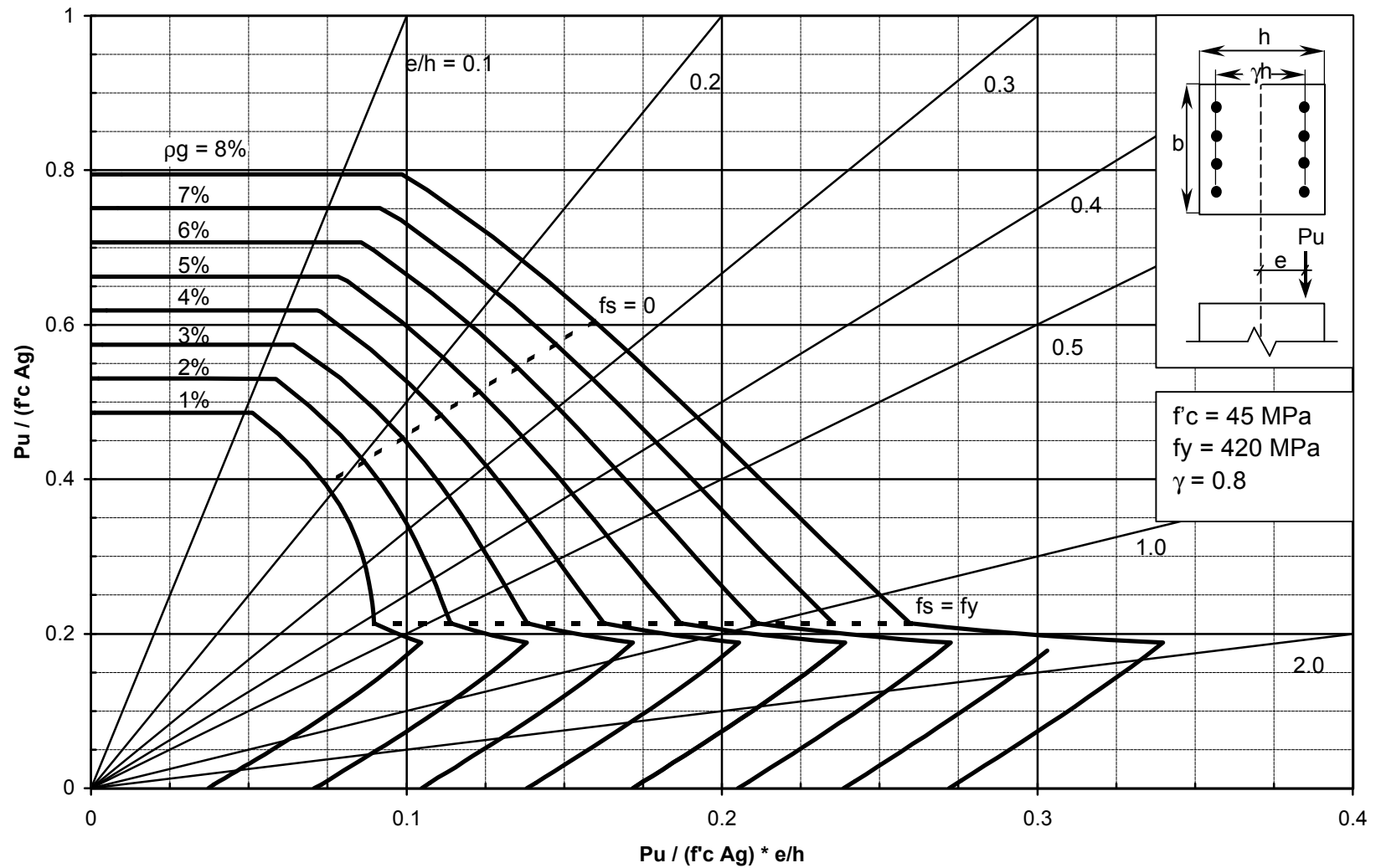
4- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



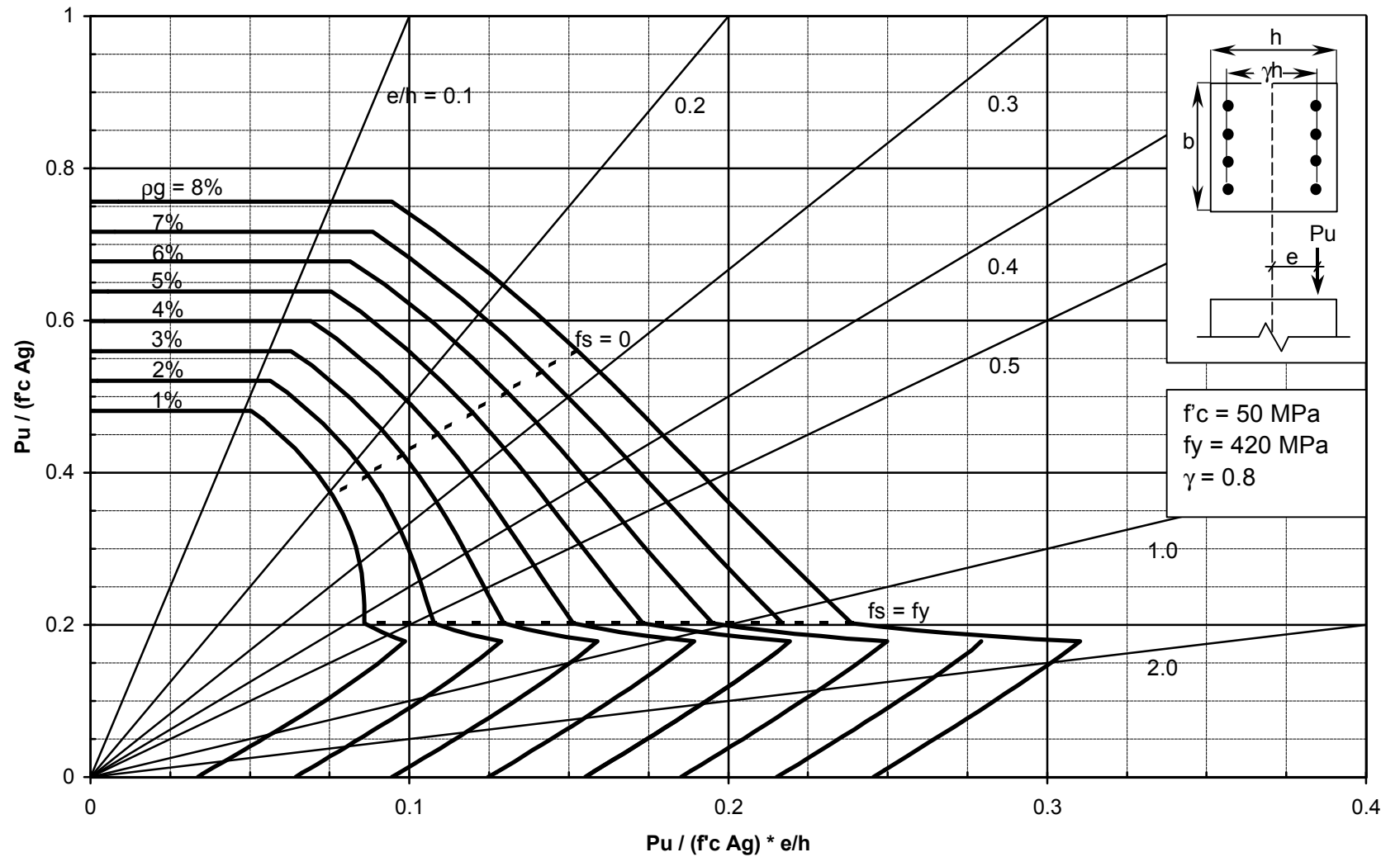
5- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



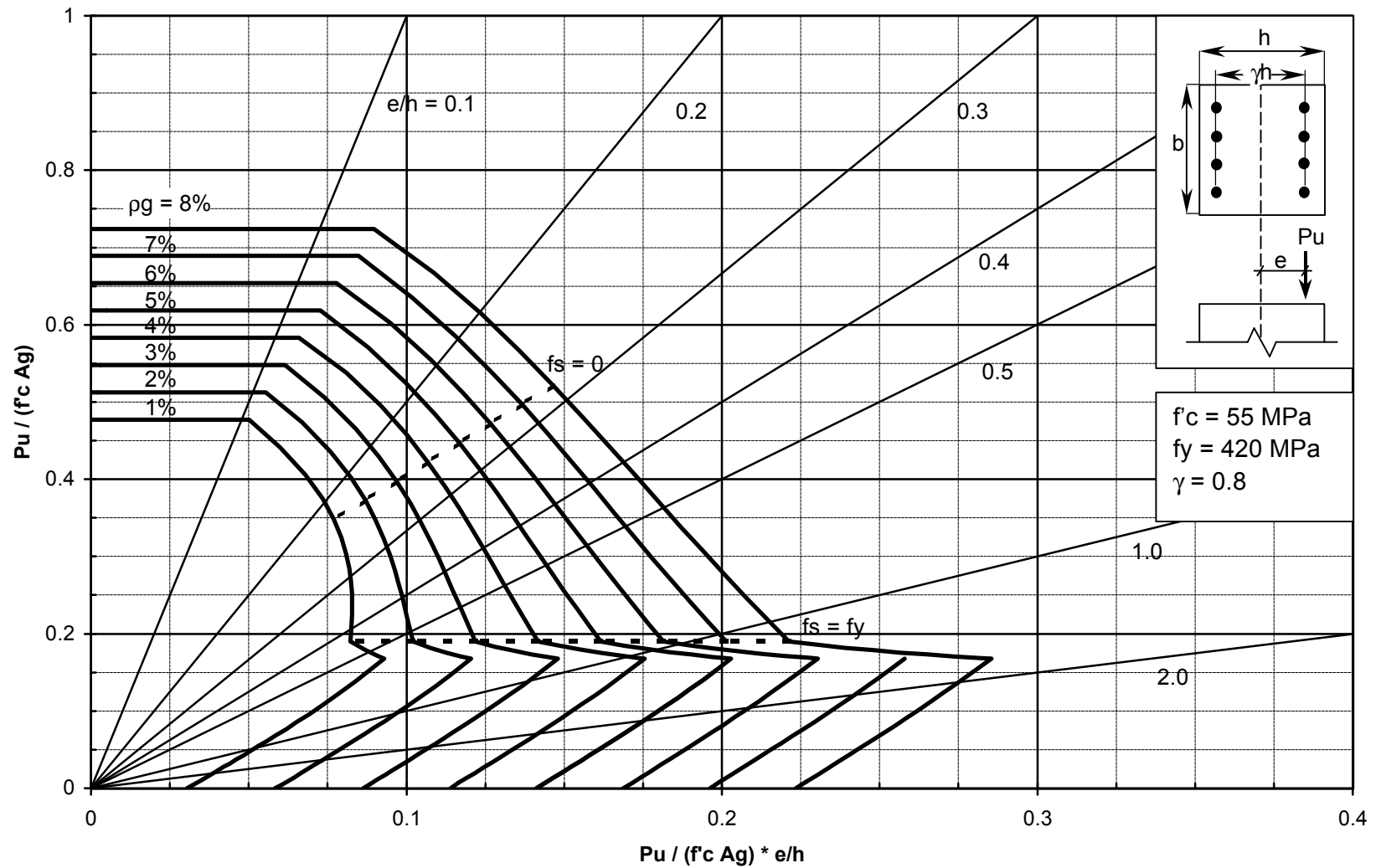
6- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



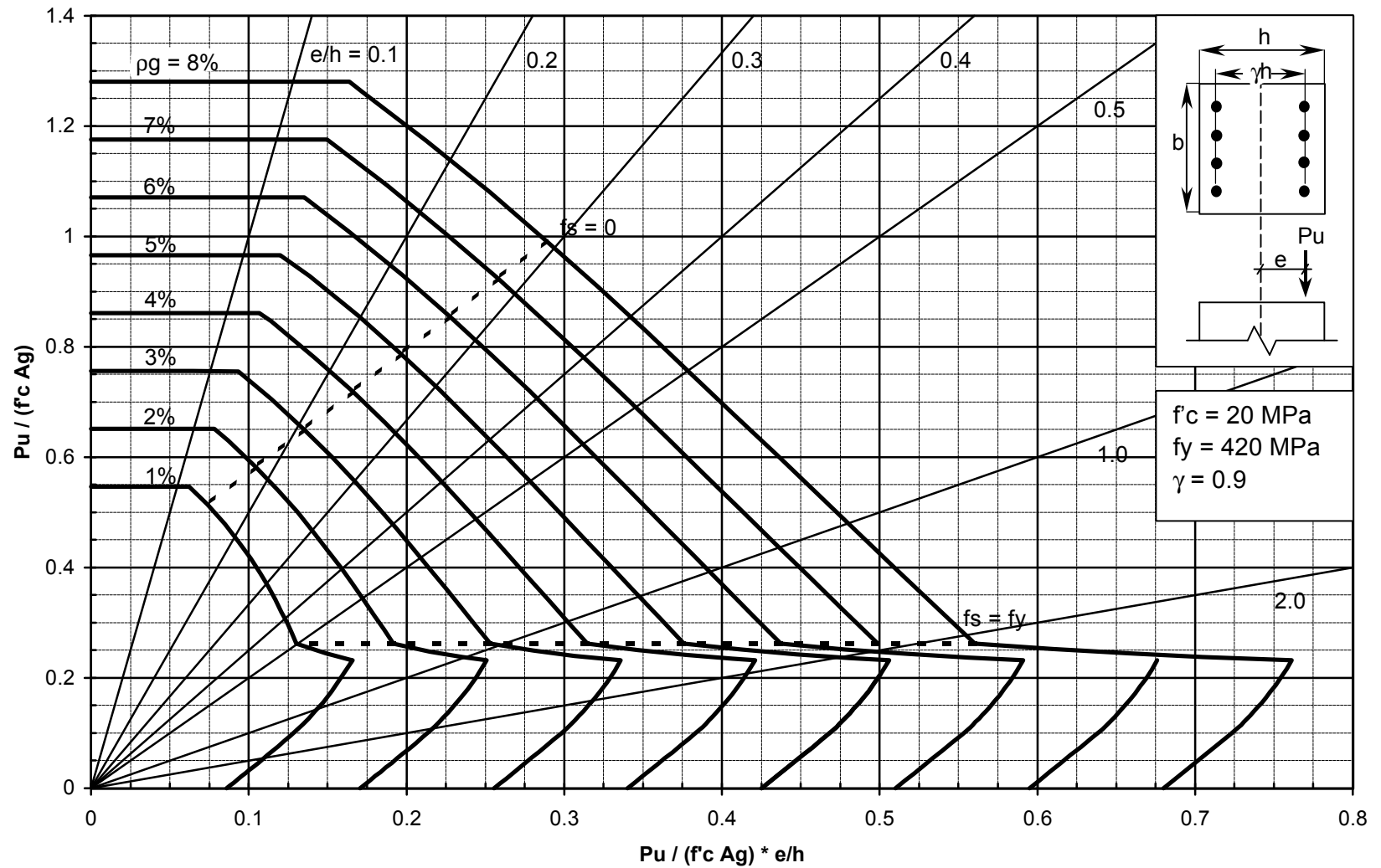
7- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



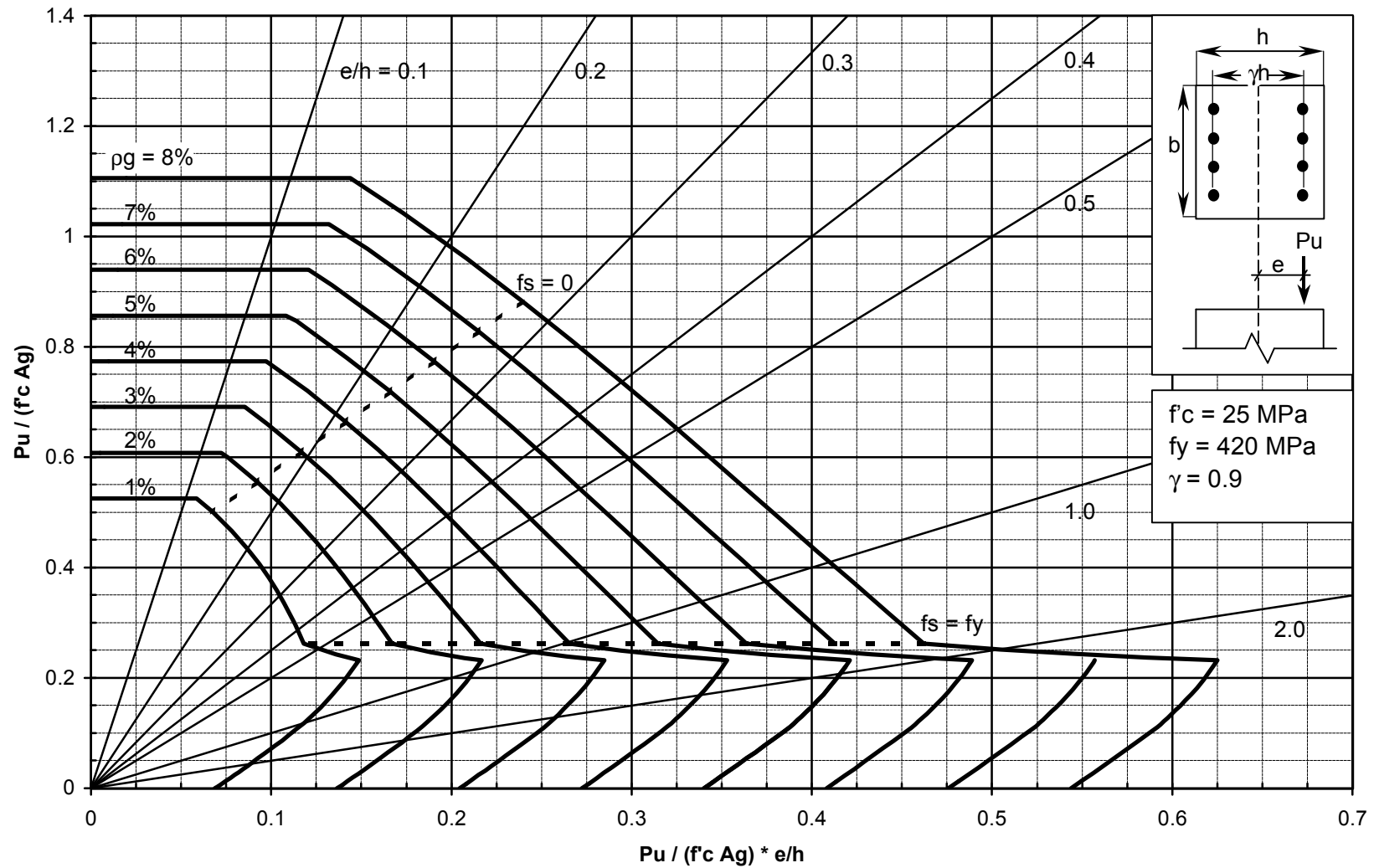
8- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



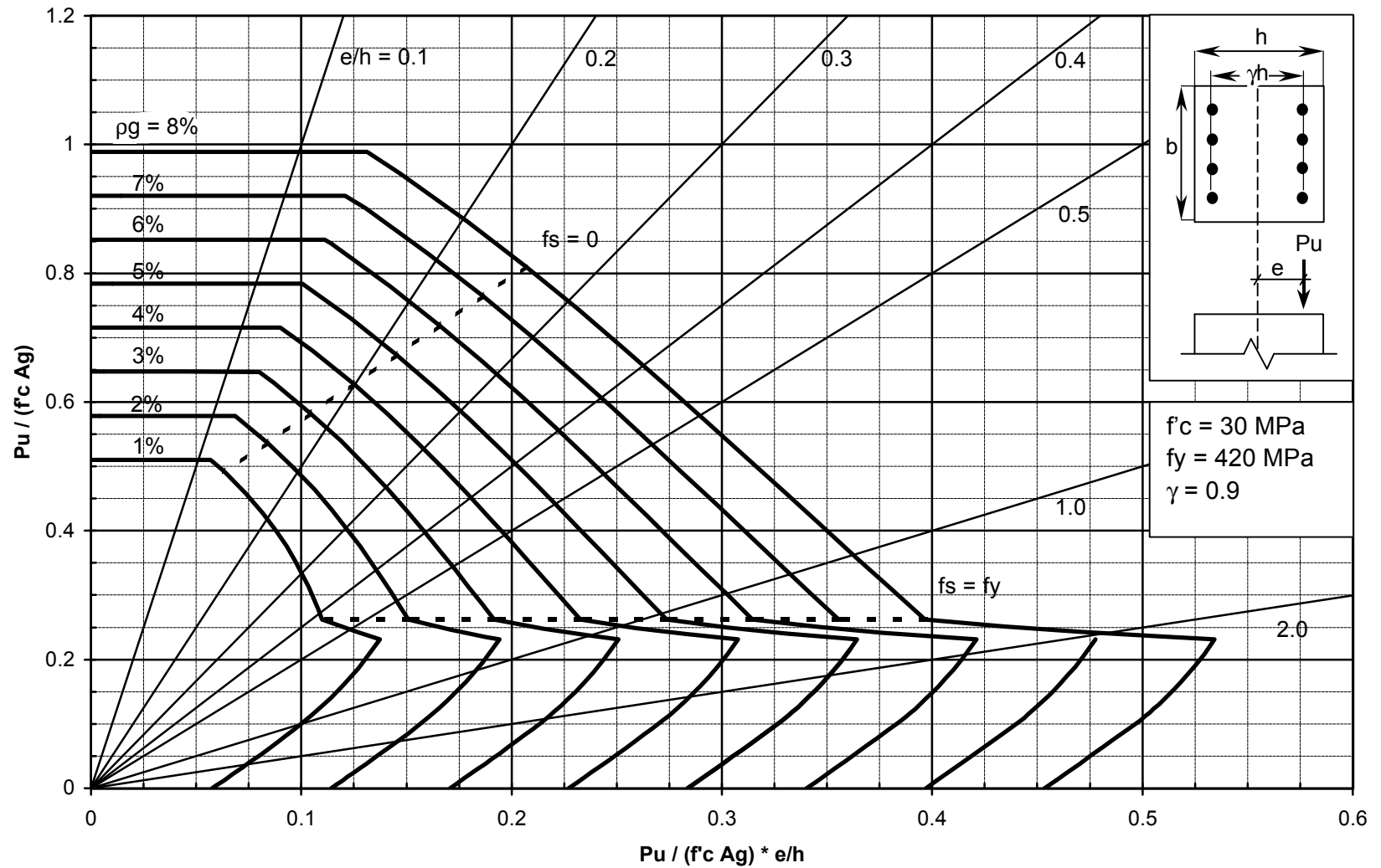
9- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



10- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos

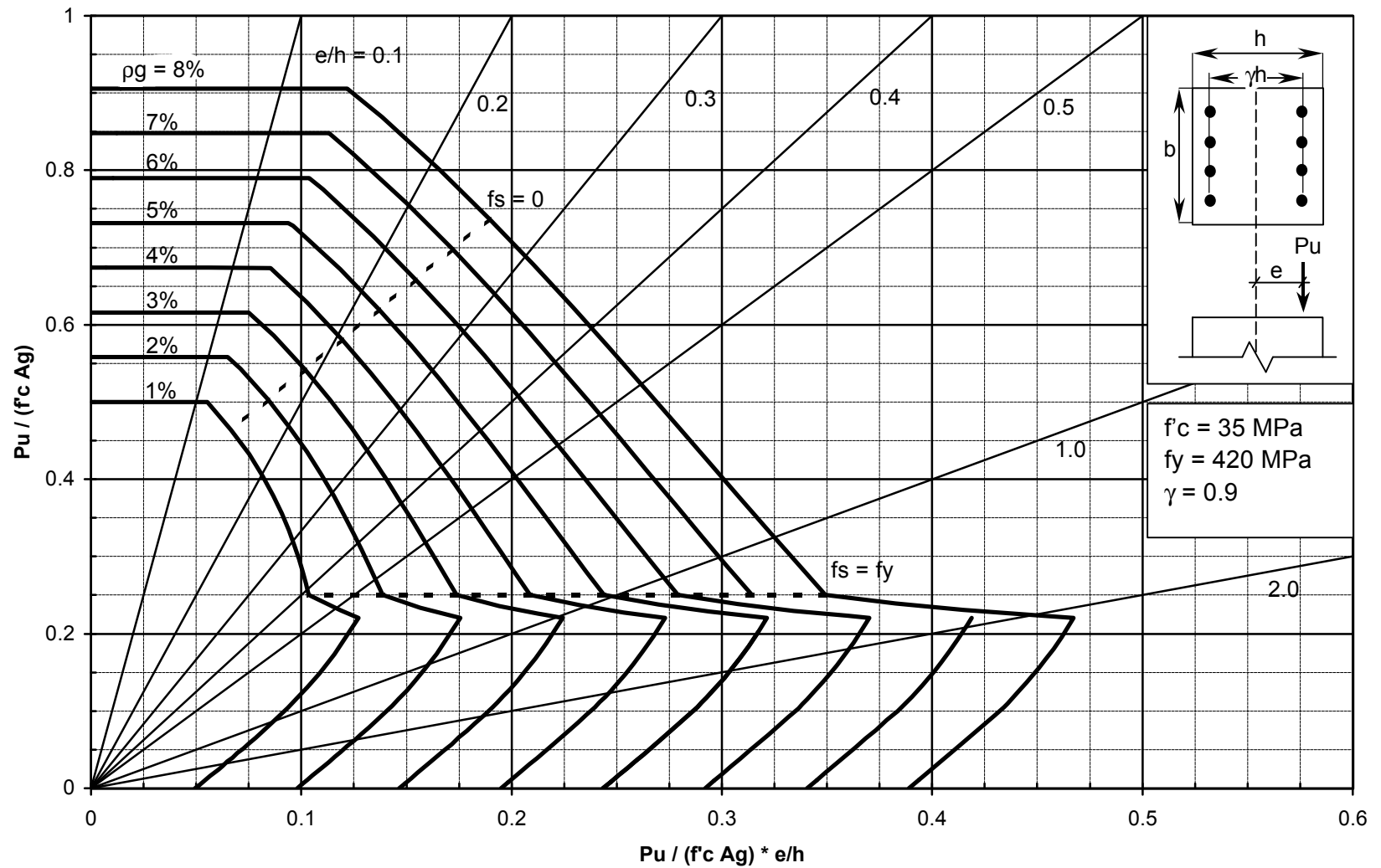


11- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos

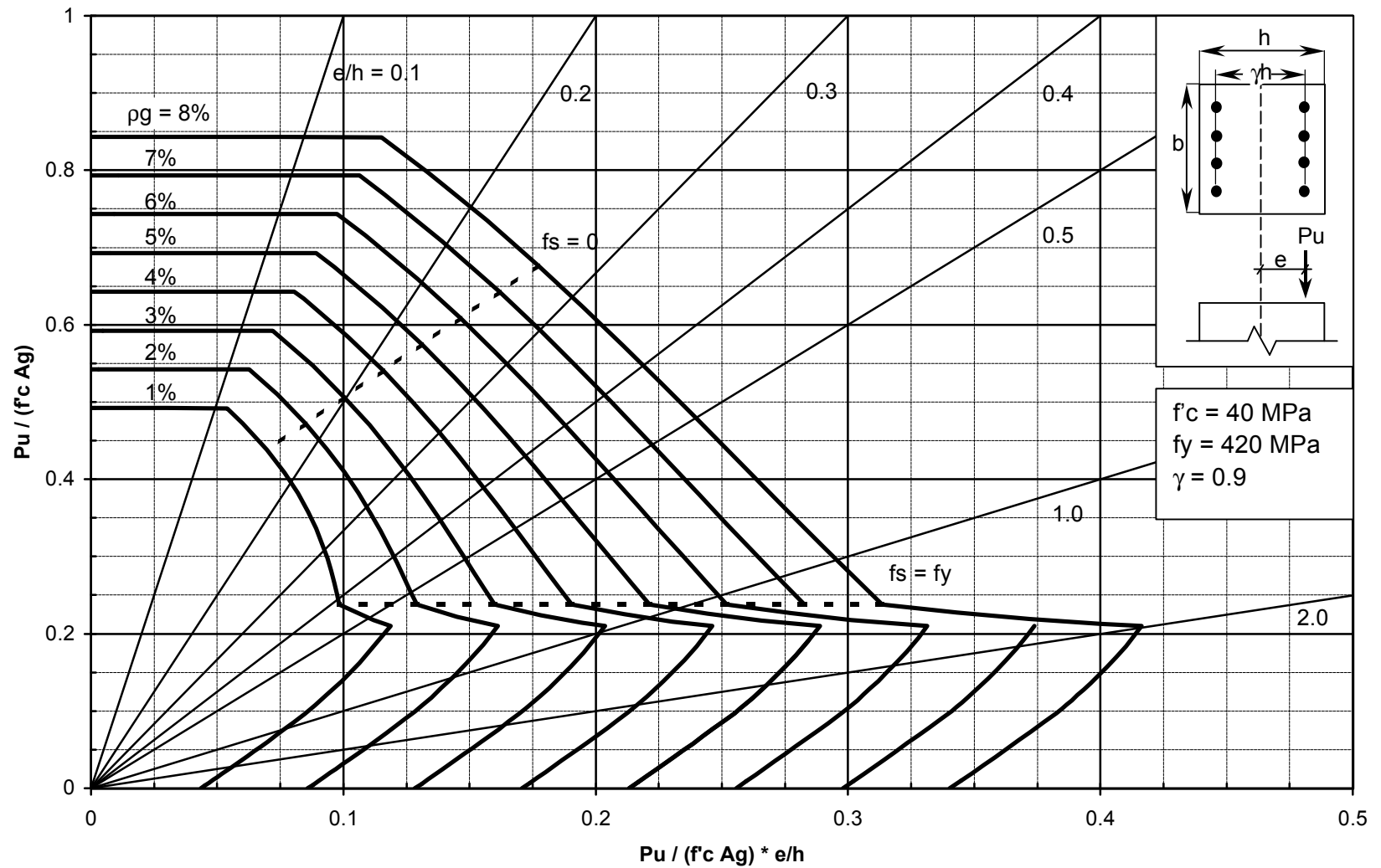


12- Diagrama de Interacción Pu - Mu

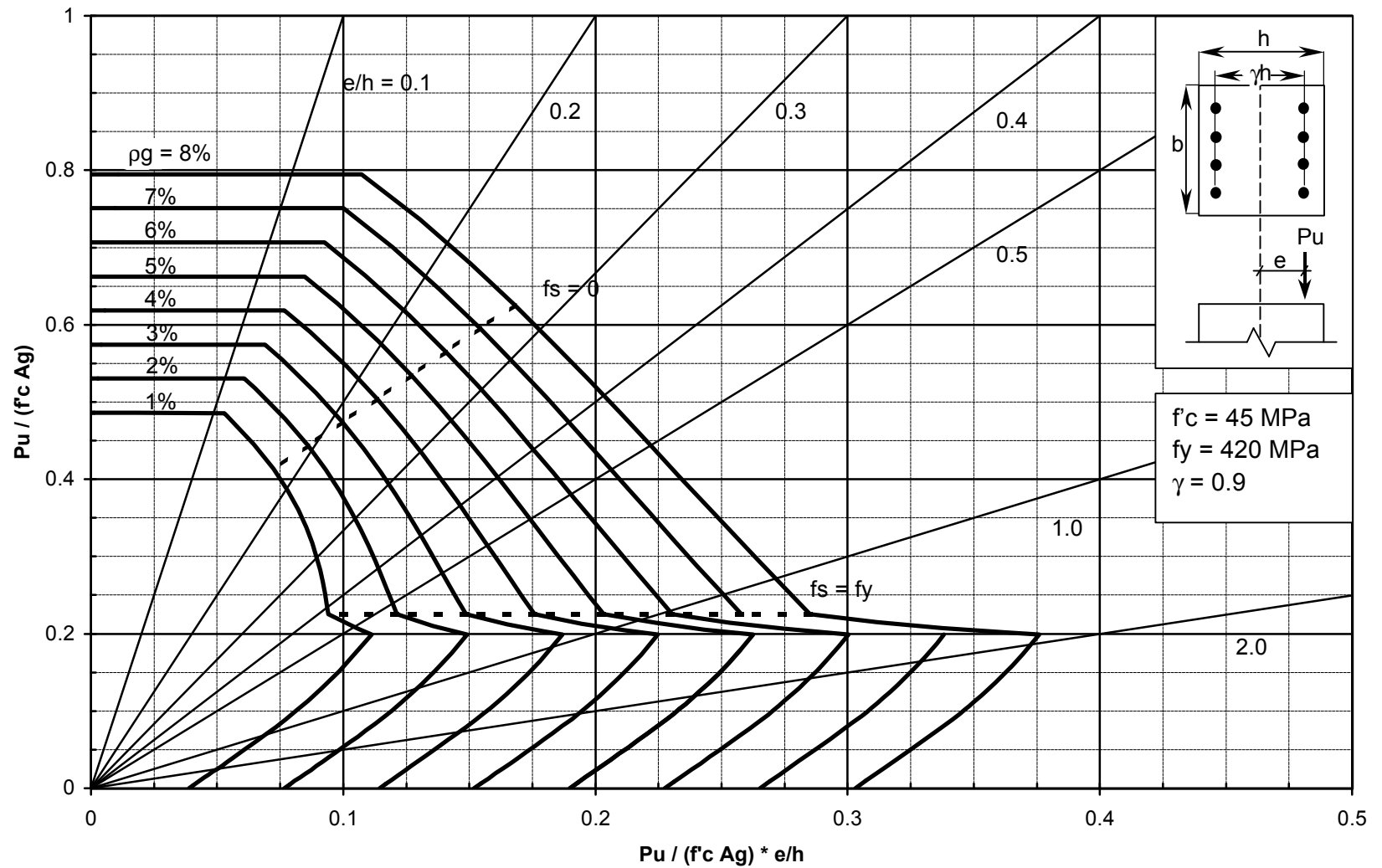
Columnas Armadura en Bordes Extremos



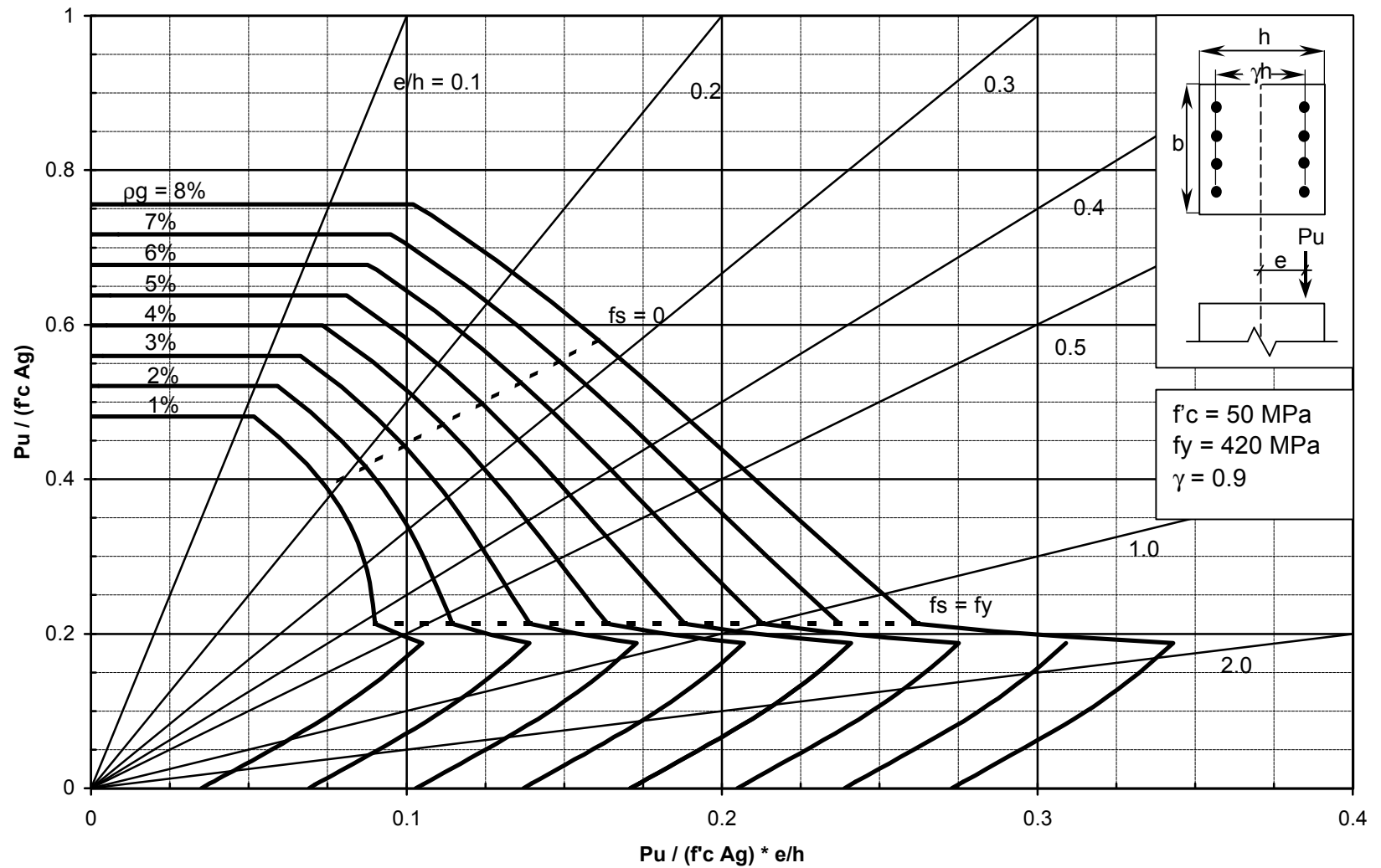
13- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



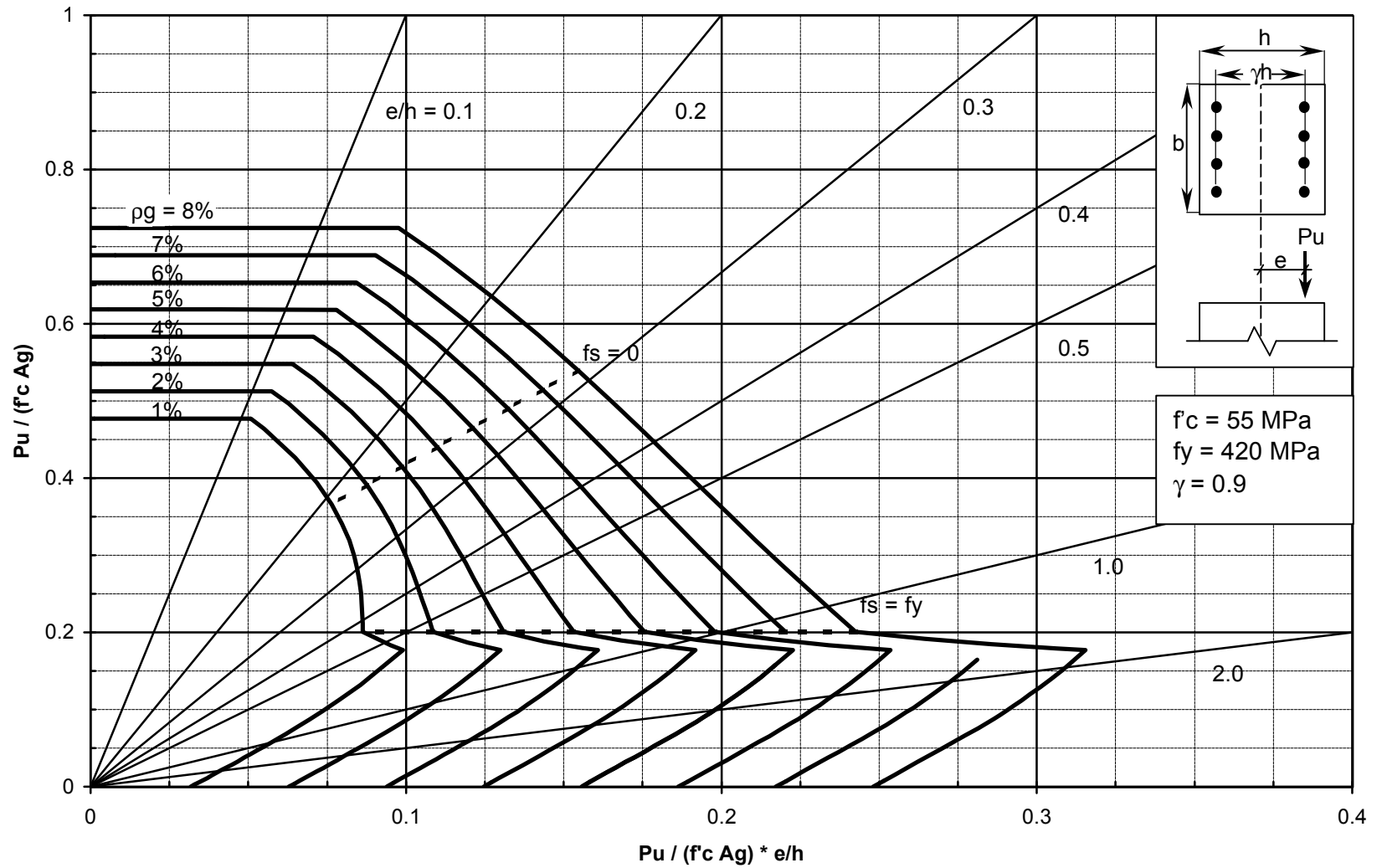
14- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



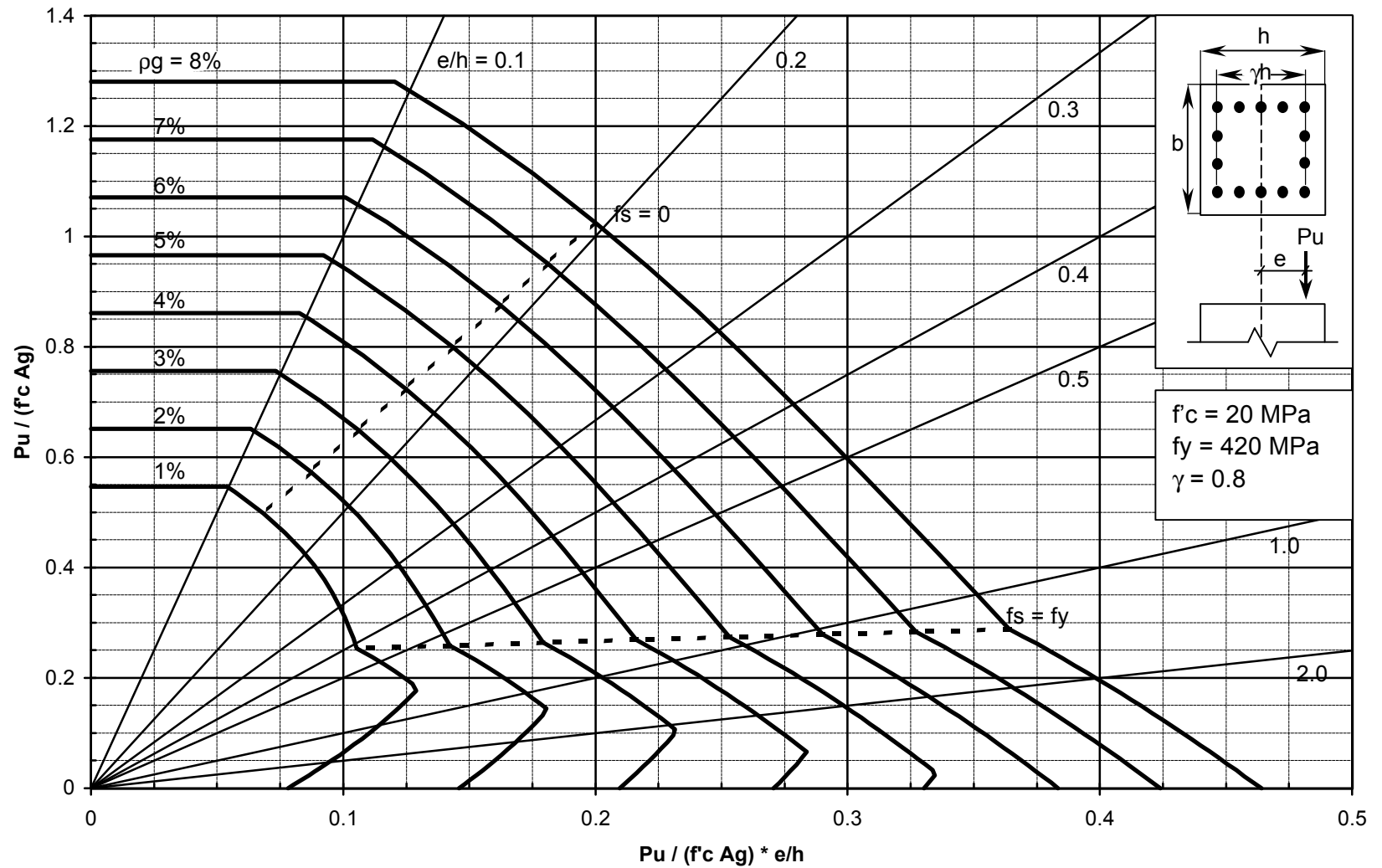
15- Diagrama de Interacción Pu - Mu Columnas Armadura en Bordes Extremos



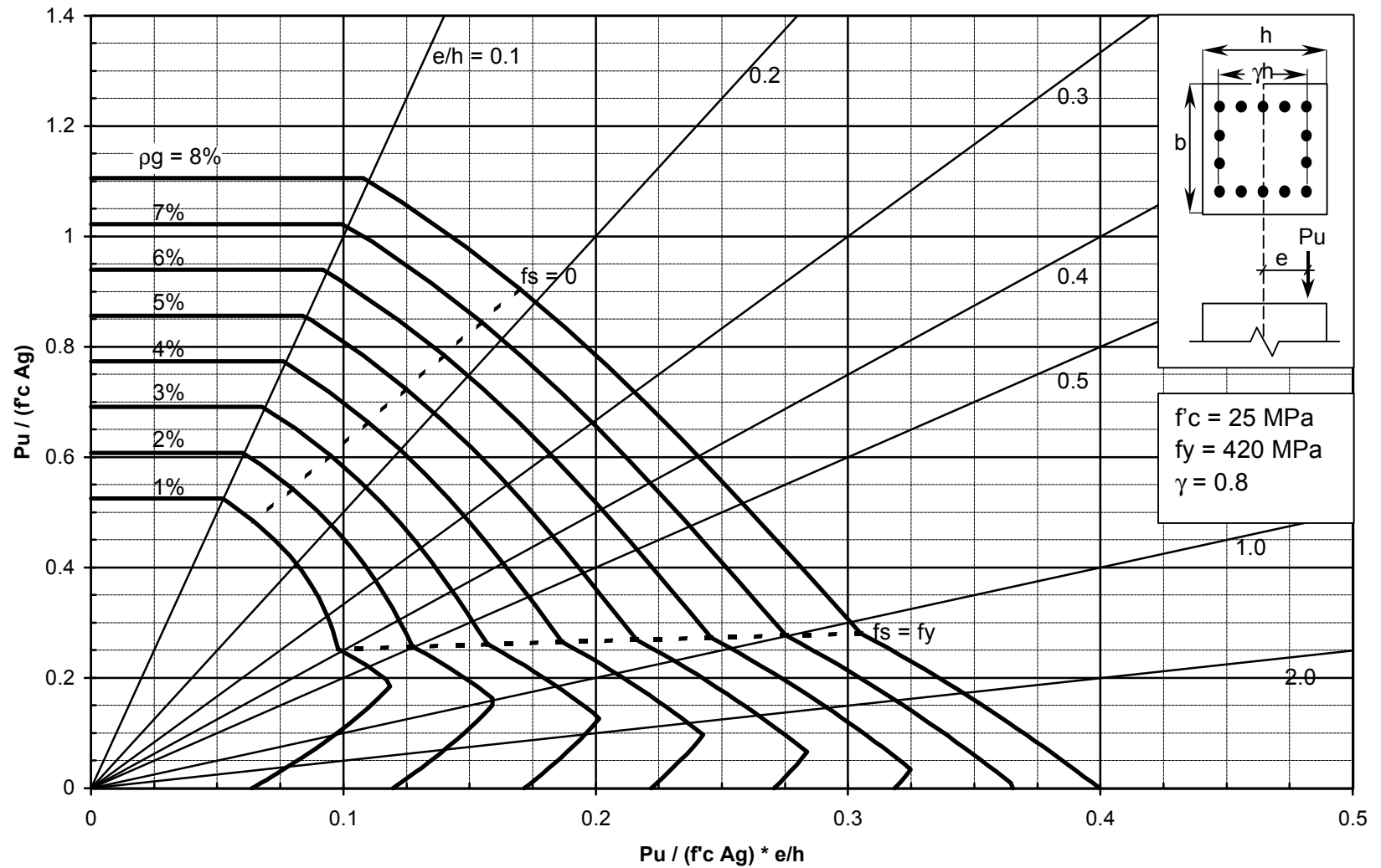
16- Diagrama de Interacción Pu - Mu
Columnas Armadura en Bordes Extremos



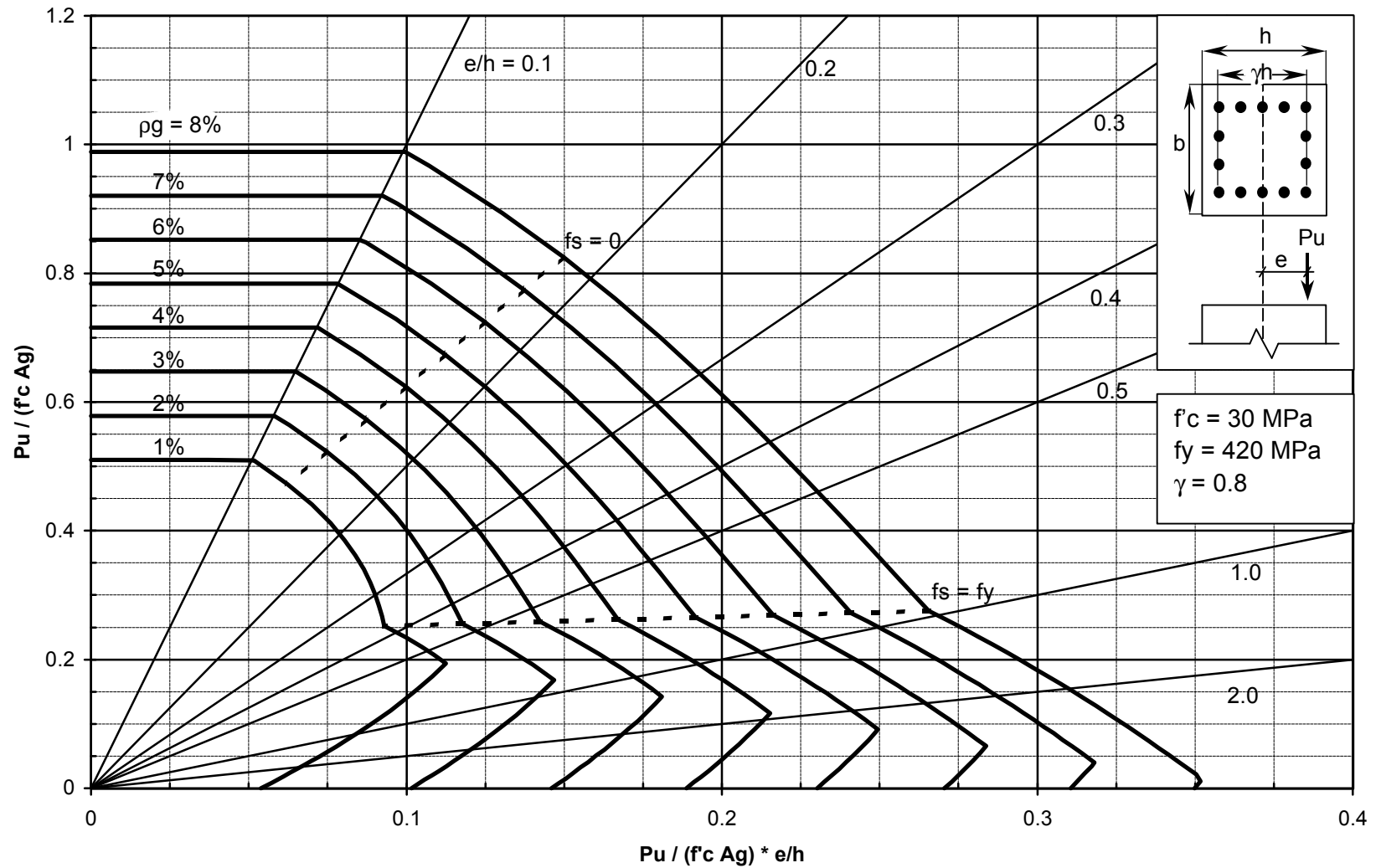
17- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



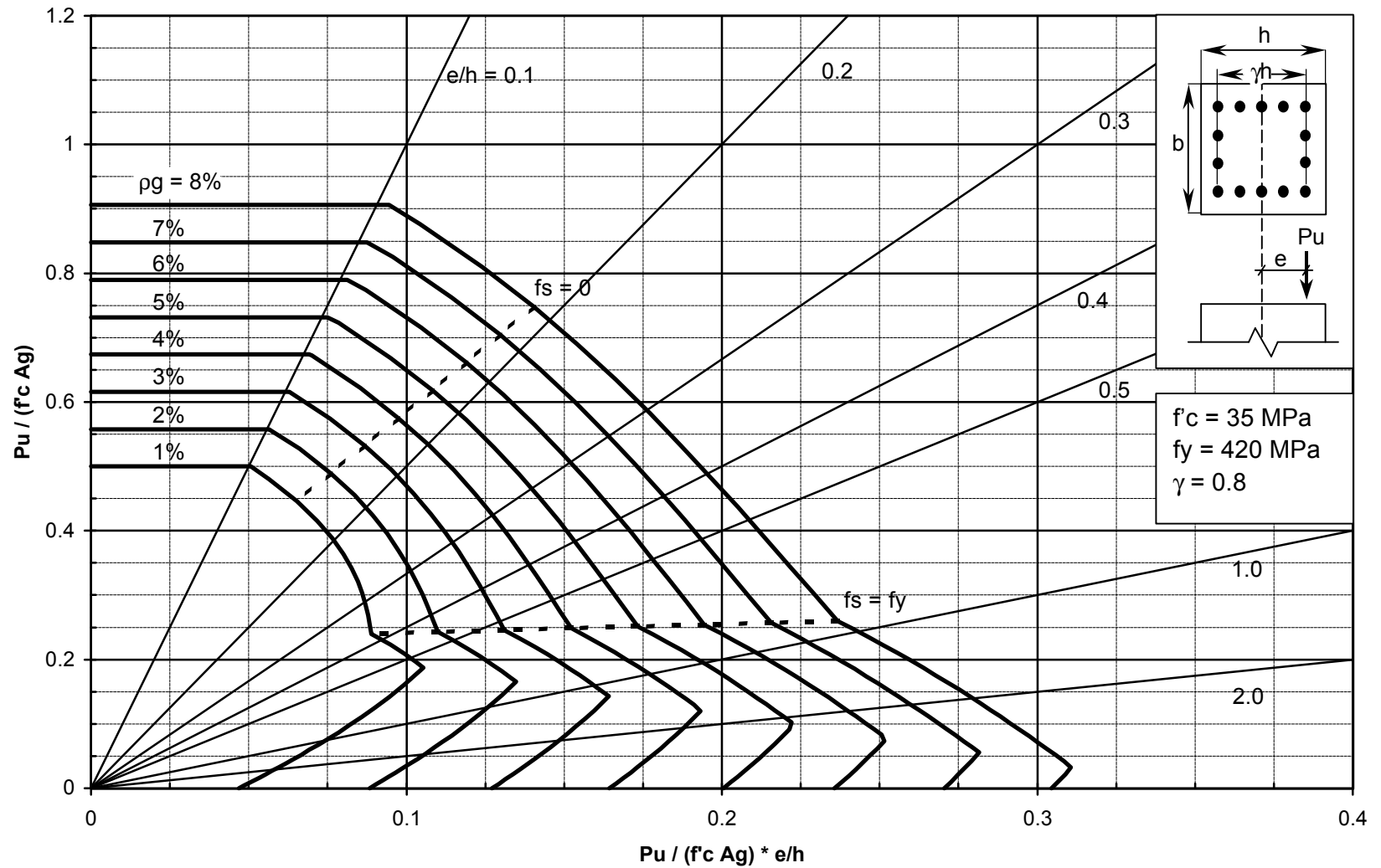
18- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



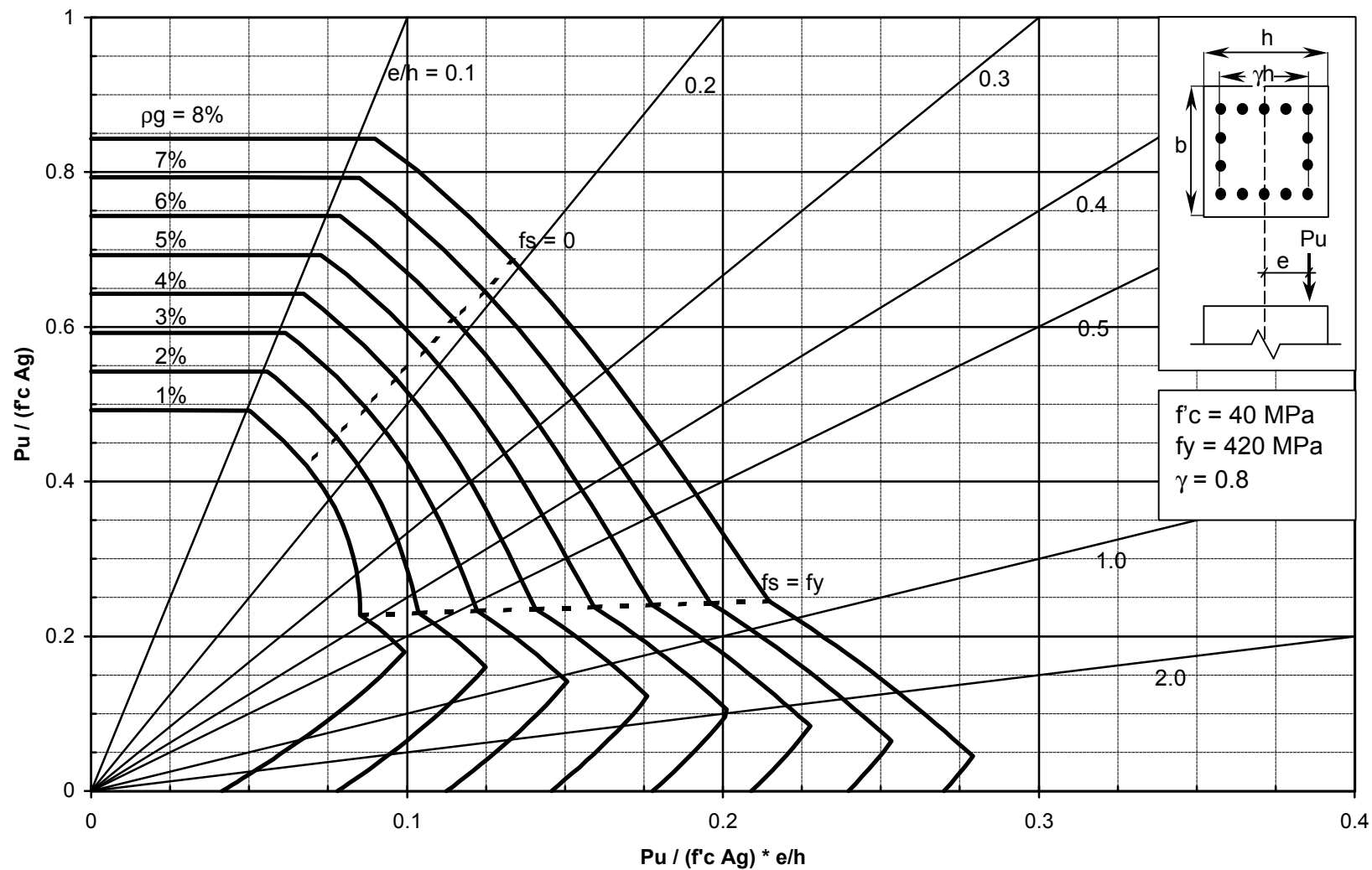
19- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



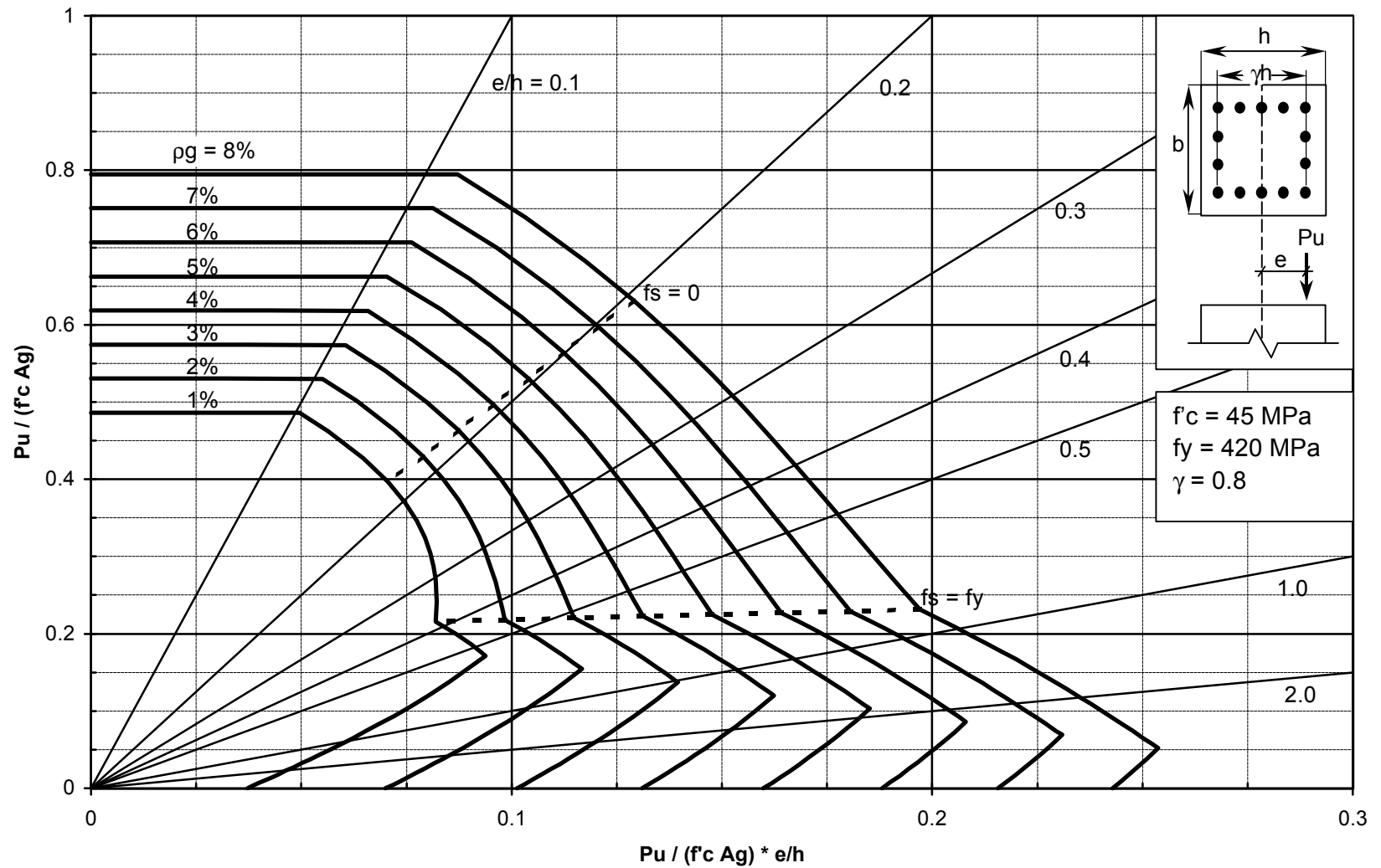
20- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



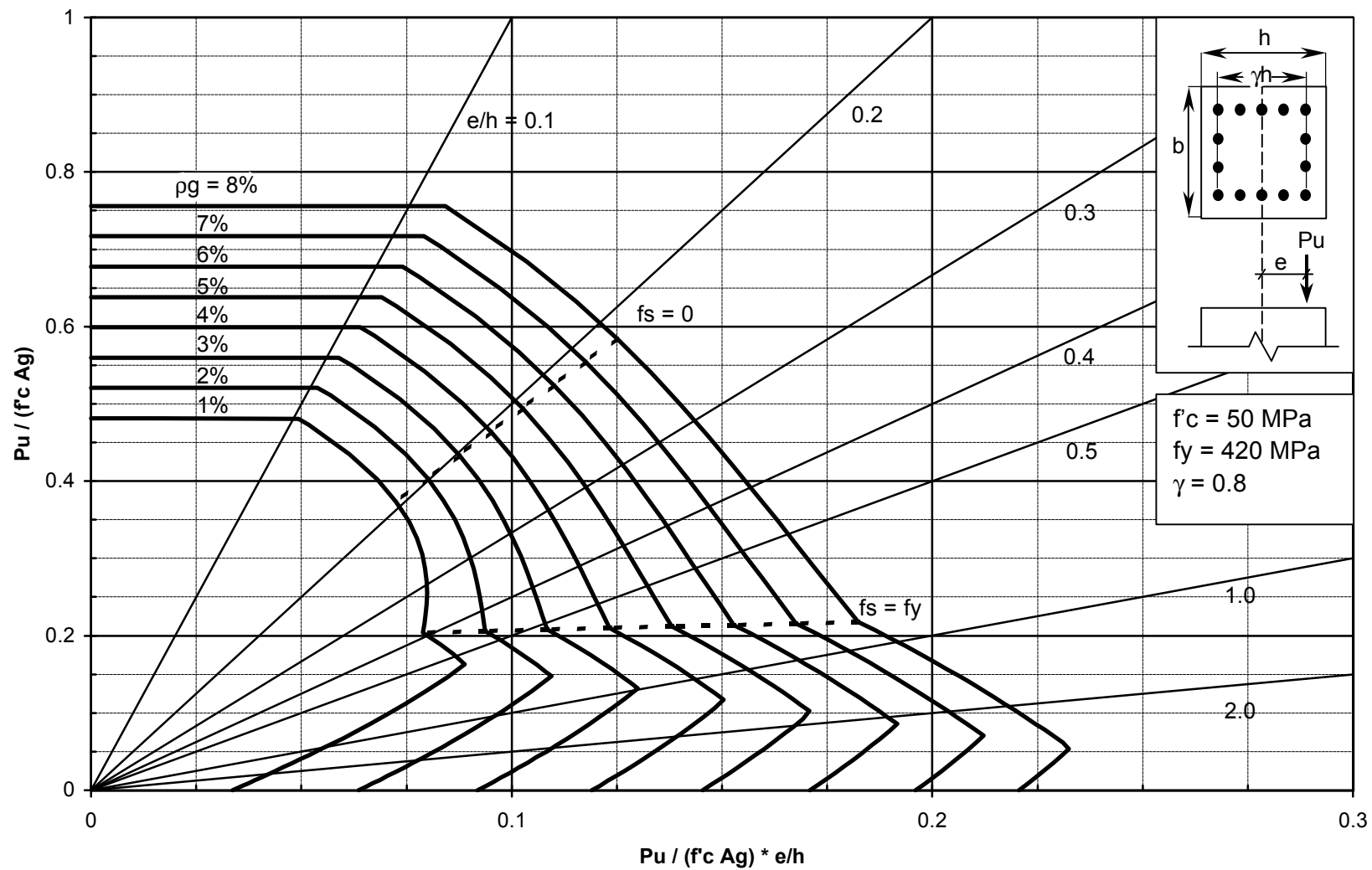
21- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



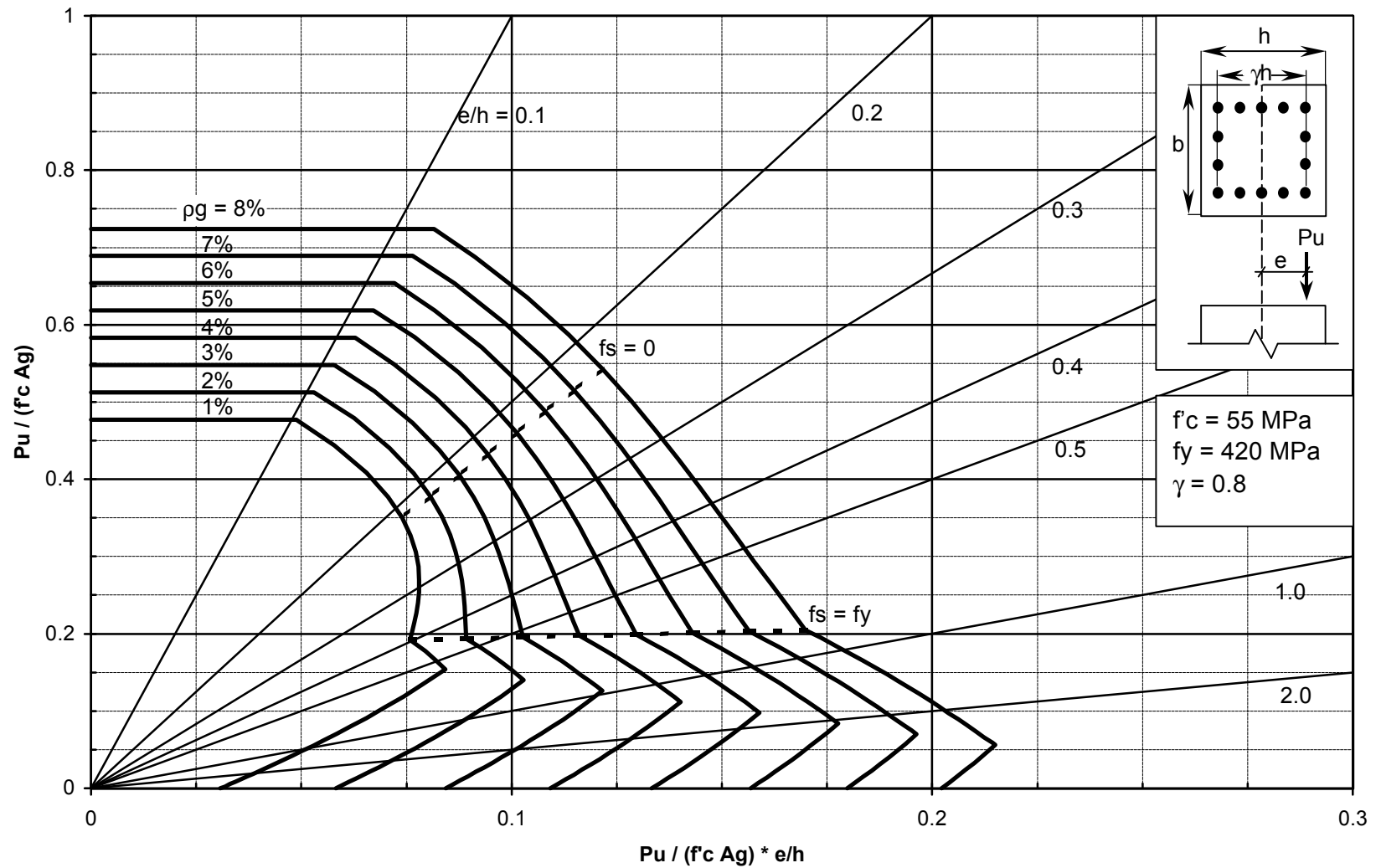
22- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



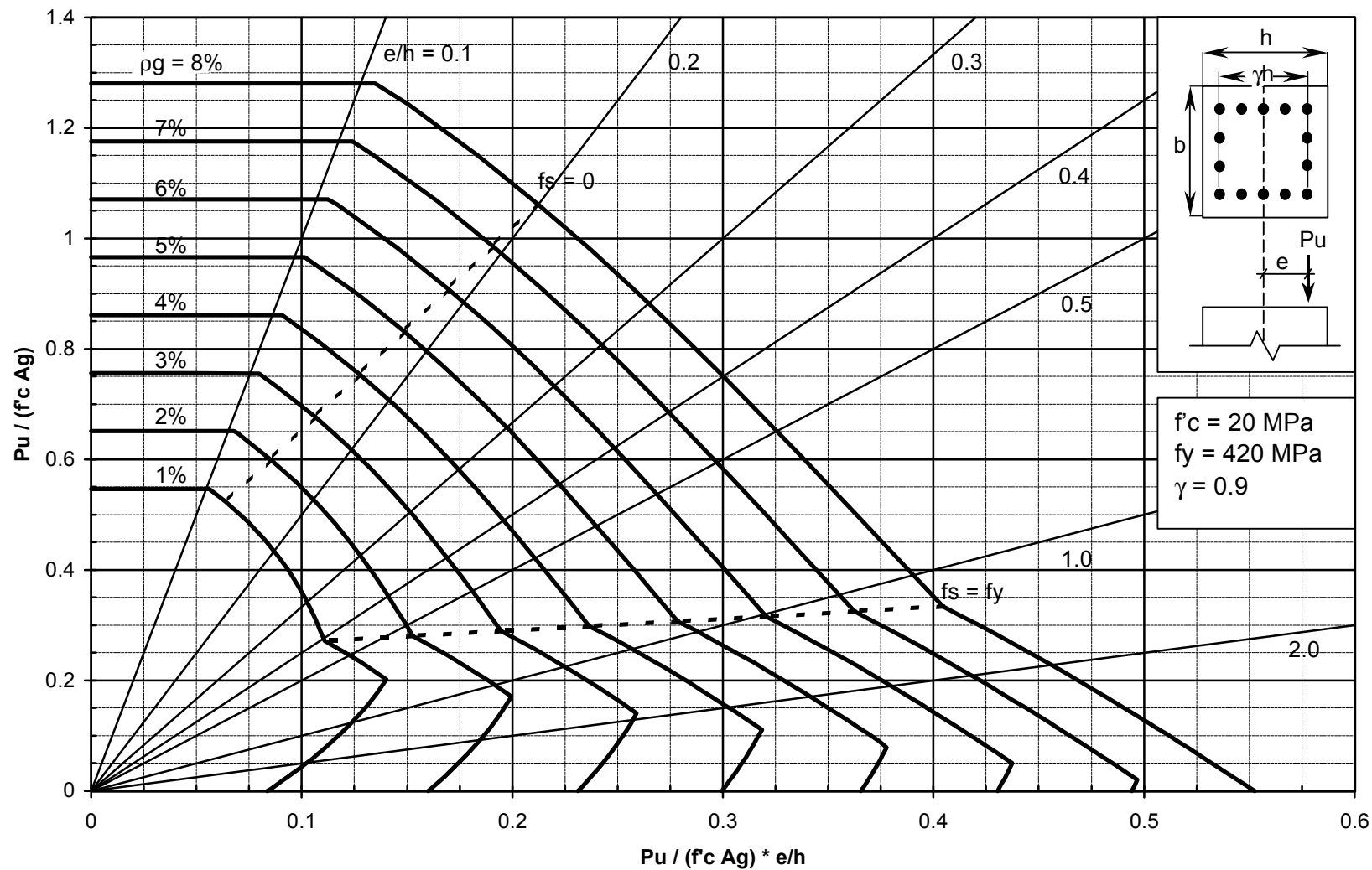
23- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



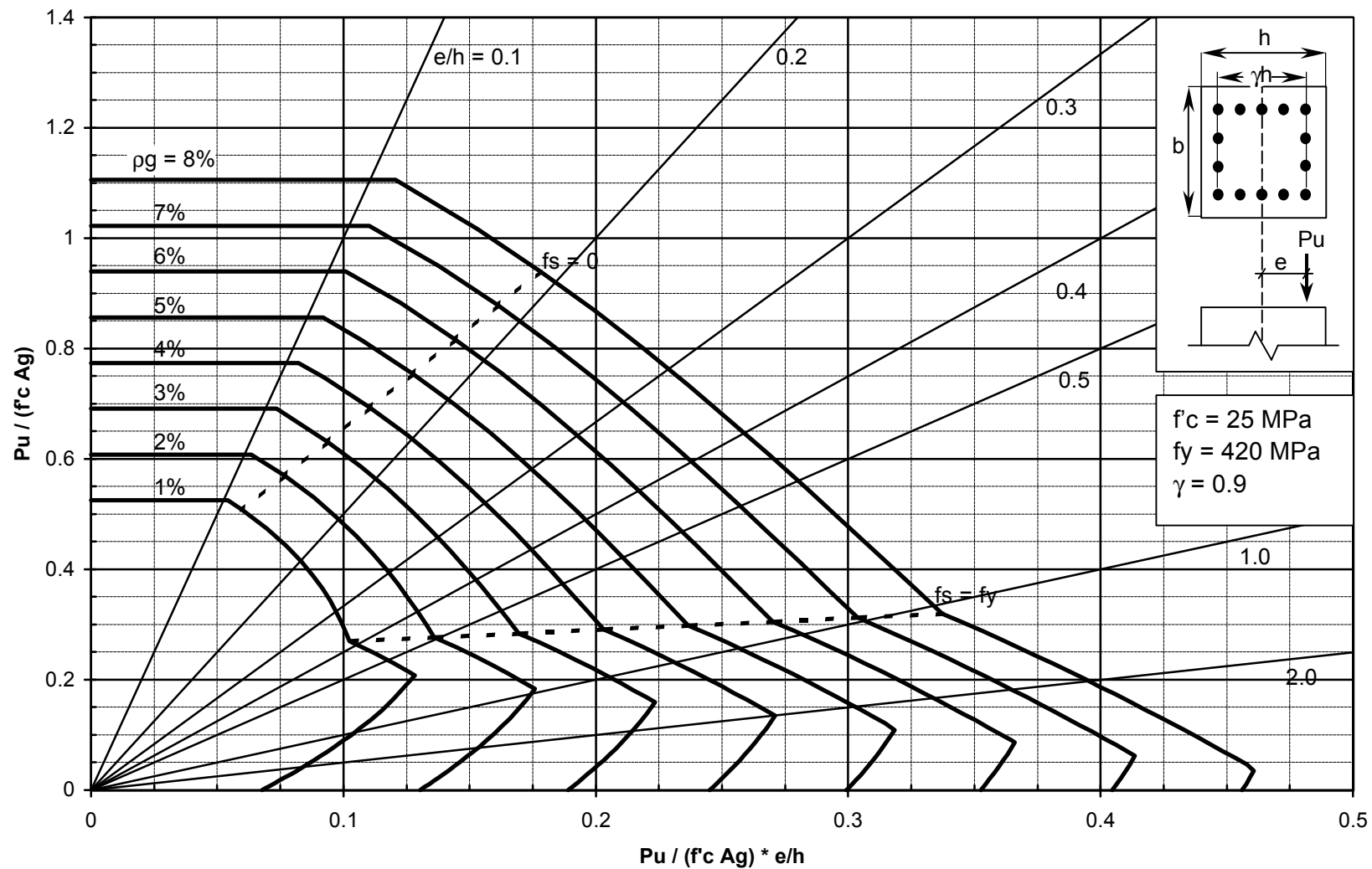
24- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



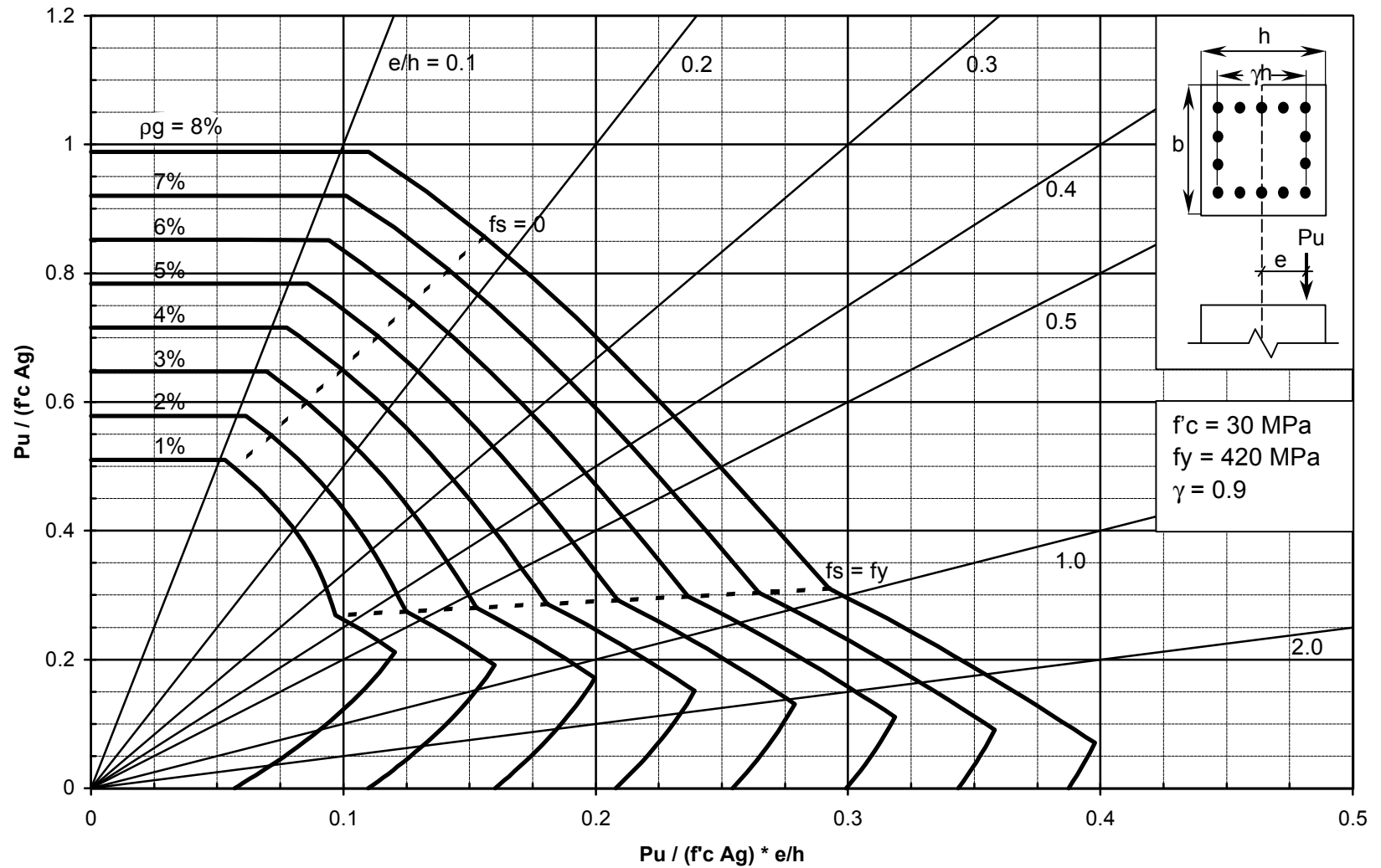
25- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



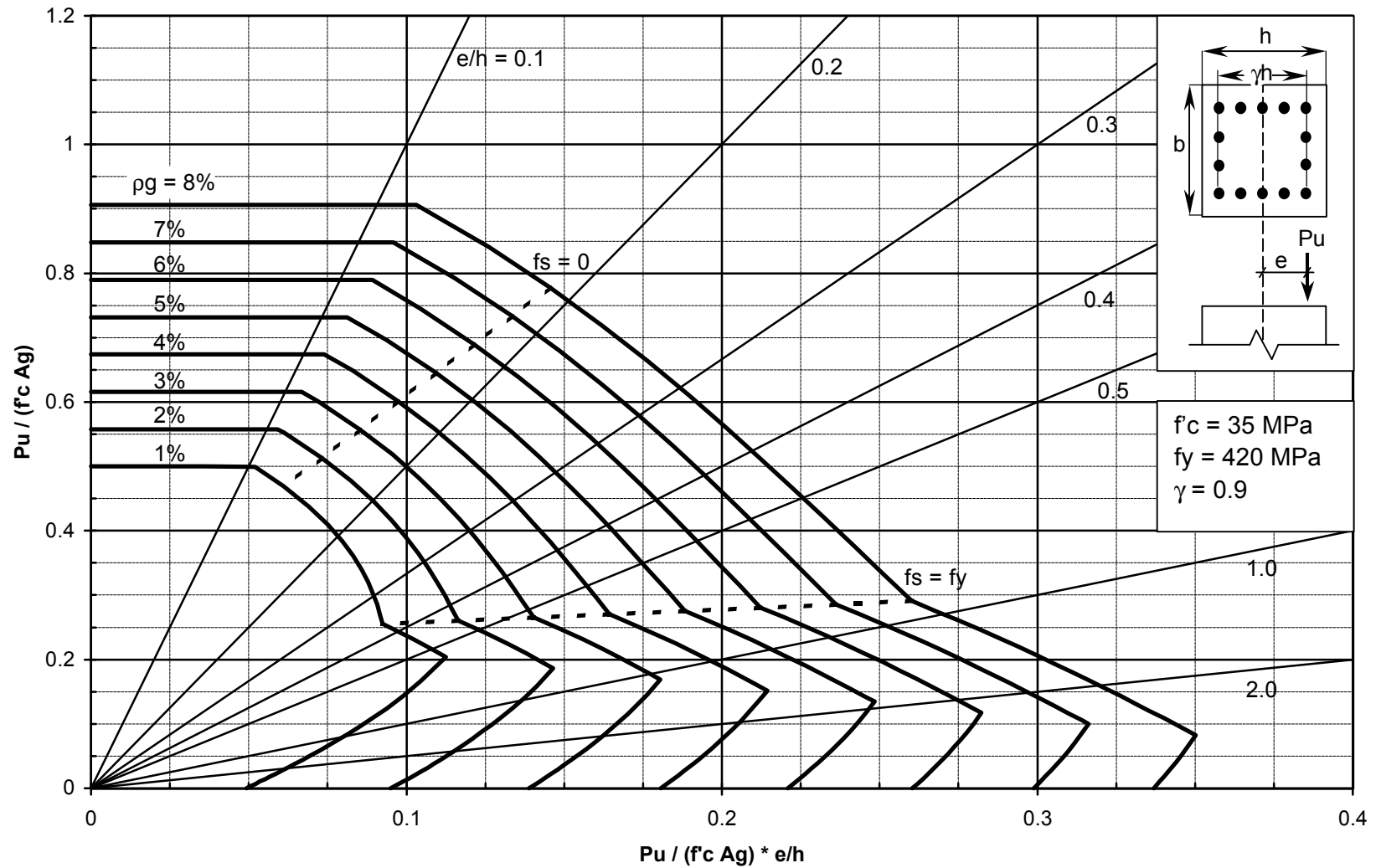
26- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



27- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral

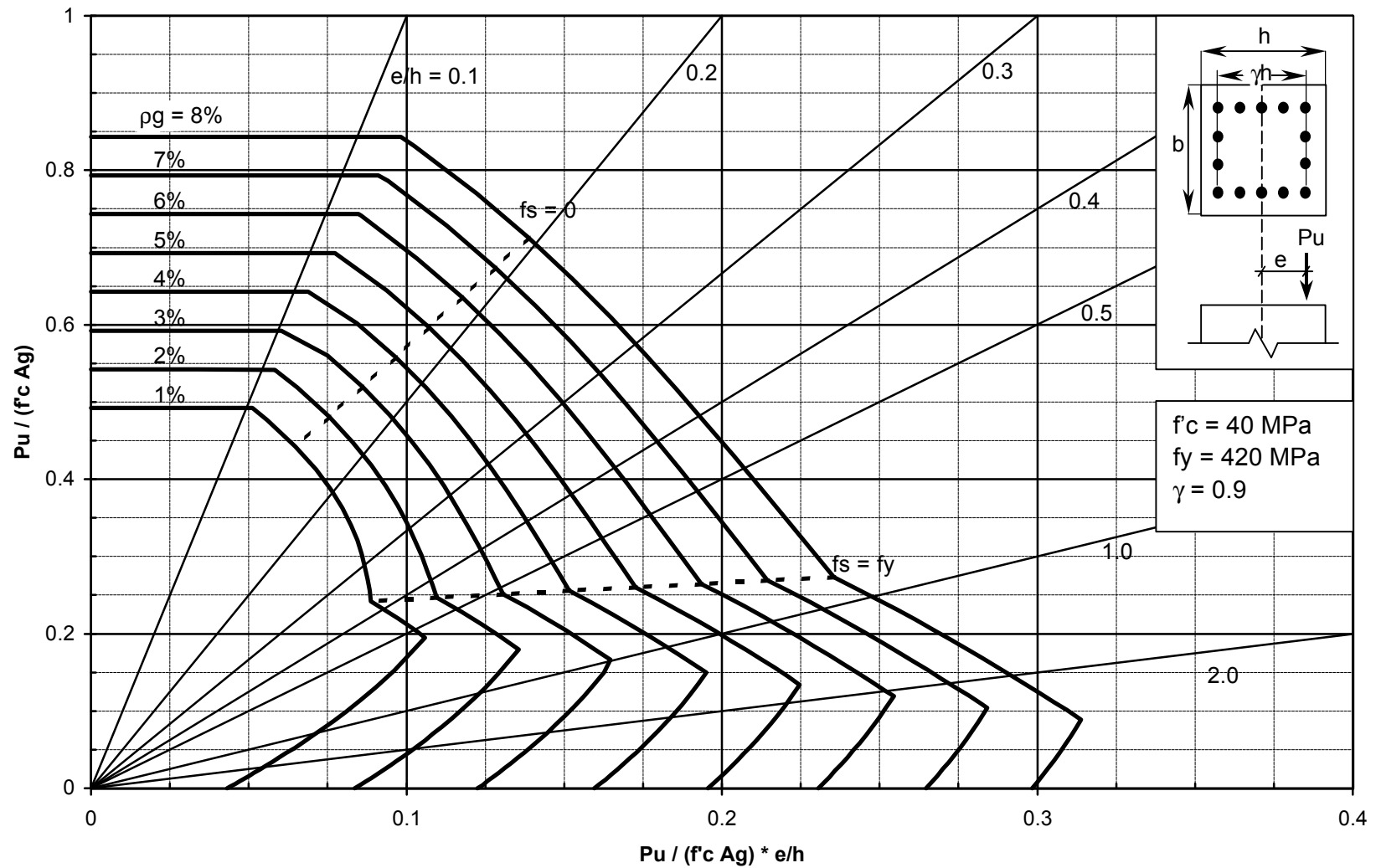


28- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral

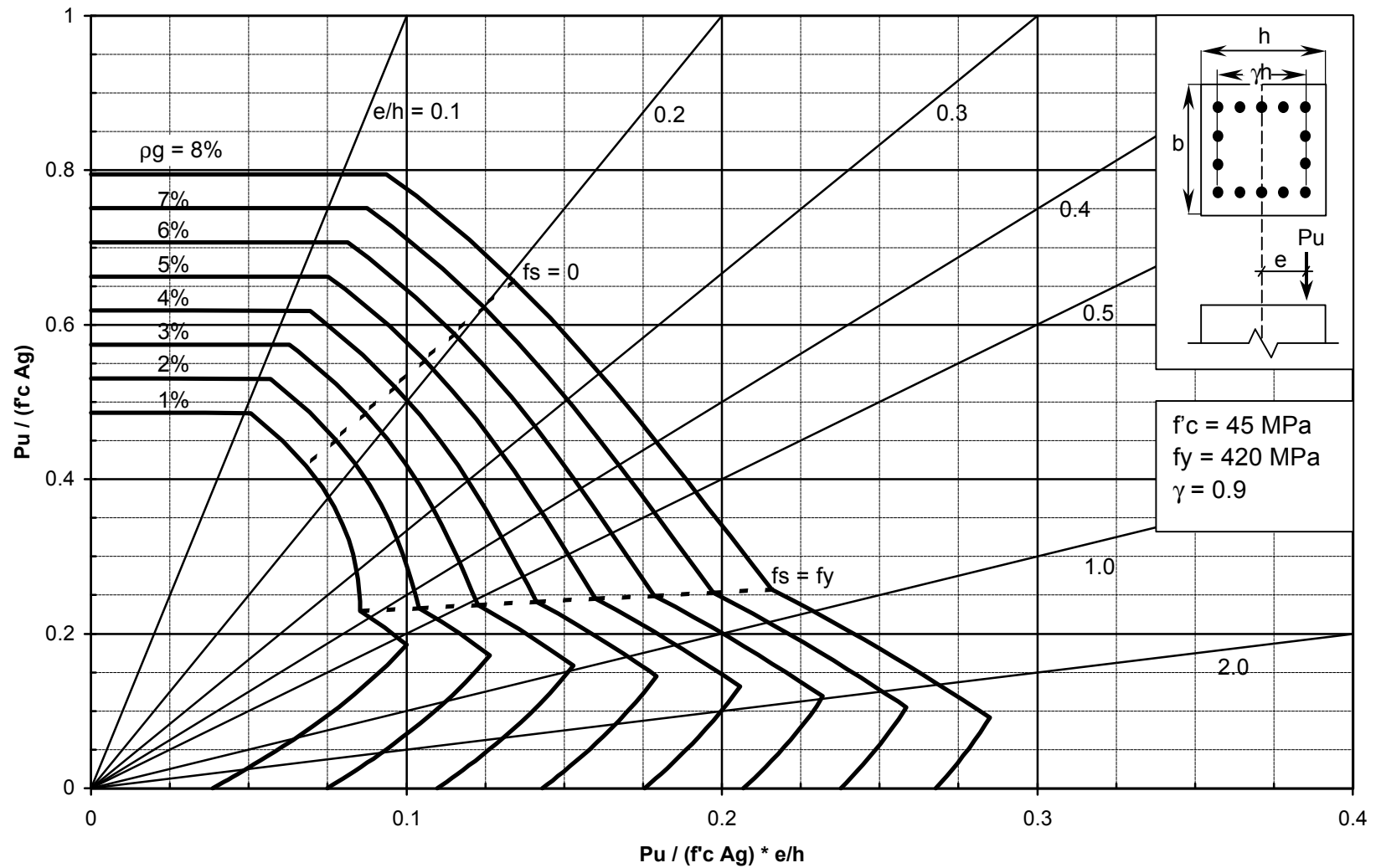


29- Diagrama de Interacción Pu - Mu

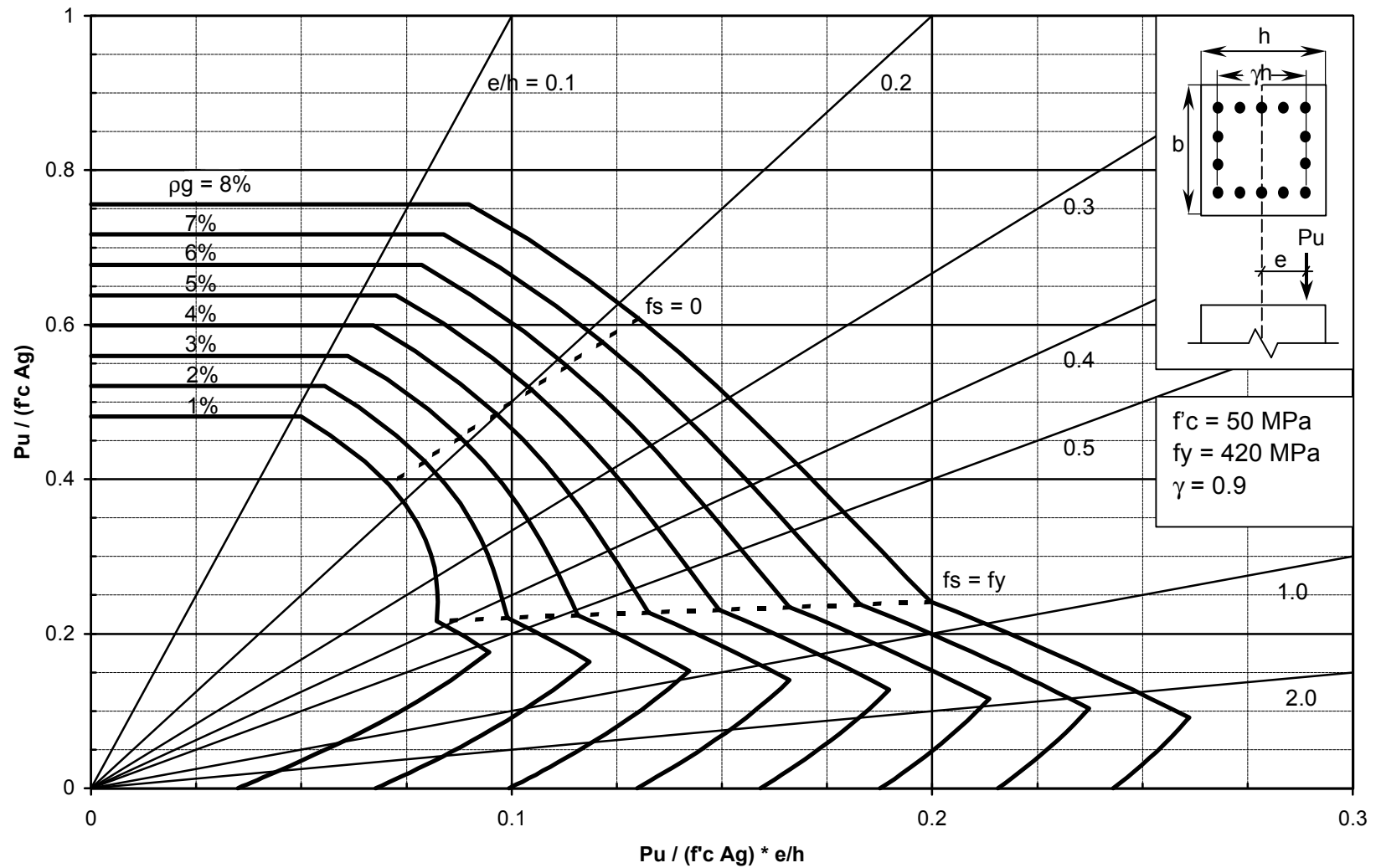
Columnas Armadura Perimetral



30- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



31- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral



32- Diagrama de Interacción Pu - Mu Columnas Armadura Perimetral

