

## **Management of building construction**

### **A. Architects**

Till the end of 2007, the number of licensed architects is 3,311 which increases 1.9% in comparison with 3,251 in 2006, and 3,283 of them are Class A architects; in addition, the number of Class B architects (licensed according to Article 53 of the Architects Act) is 28. Taipei City has the most architects: 1,140 people; 487 in Taipei County, 408 in Taichung City, 266 in Kaoshiung City, 152 in Taoyuan City and 145 in Tainan City, 78.5% of all licensed architects. It shows that the request in the space of buildings in urban area is rarely high due to centralization of population. With the convenience of information and traffic, urban city becomes the area for licensed architects centralized.

### **B. Construction management**

According to the Construction Industry Law, construction is divided into comprehensive construction enterprises and specialized construction enterprises and construction projects by contracts. Comprehensive construction enterprises are categorized into three groups: A grade, B grade and C grade. By the end of 2007, the number of construction companies was 14,202. There were 6,194 companies of C grade comprehensive construction enterprises (43.6%), 4,794 company of construction projects by contracts (33.8%), 1,671 A grade comprehensive construction enterprises (11.8%), 1,328 B grade comprehensive construction enterprises (9.4%) and 215 companies of specialized construction enterprise (1.5%).

The capital of the whole construction was 474,150 million dollars; A grade comprehensive construction had 52.7% of the whole capital, specialized construction enterprises had 35.3% and construction projects by contracts had the least -- 1.0%.

In terms of construction companies' average capital, the average amount for each company was 33,390,000 dollars in 2007. The highest average capital of companies was in Kaoshiung City, with the amount of 152,610,000 dollars; 139,920,000 dollars in Taipei City, 31,050,000 dollars in Kaoshiung County, 24,250,000 dollars in Taichung City and 19,790,000 dollars in Taipei County.

### **C. Safety inspection in lifting equipment of buildings**

By the end of 2007, there were 6 institutions of safety inspection in lifting equipment of buildings, including 5 in Taipei City and 1 in Kaoshiung City and 381 specialized companies which increased 3.8% in comparison with 367 in 2006. Taipei City had the most specialized companies – 93 (24.4%), followed by 71 companies in Taipei County (18.6%) and 41 companies in Kaoshiung City (10.8%). There were 6,111 professional technicians which increased 2.3% in comparison with 5,976 in 2006; 3,738 in Taipei City (61.2%), 684 in Taipei County (11.2%) and 331 in Kaoshiung City (5.4%).

By the end of 2007, the case number of the inspected lifting equipments were 131,488 which increased 3.0% in comparison with 127,695 in 2006 and 131,486 lifting equipments were qualified (100.0%). The cities and counties which had over ten thousand inspected lifting equipments were: 28,069 in Taipei City (21.4%), 24,851 in Taipei County (18.9%), 13,990 in Taoyuan (10.6%), 12,909 in Kaoshiung City (9.8%) and 12,617 in Taichung City (9.6%); in addition, the five counties and cities had 70.3% of the inspected amount.

#### **D. Safety inspection in mechanical recreation facilities**

By the end of 2007, the number of recreation center was 38; 32 were in business and 6 had been suspended. The number of mechanical recreation facilities was 282; 197 were still running and 85 were suspended. Among all recreation facilities, 189 were licensed, 197 had records of maintenance and 197 had regular safety inspection.

#### **E. Safety inspectors of buildings**

By the end of 2007, the number of safety inspectors of fire prevention facilities in buildings was 2,779 and the number of safety equipment inspectors was 2,697. Architects had the highest number among all – 2,062 and 2,058 respectively; followed by 121 electrical technicians and 109 construction technician. The numbers of architects and construction technician had increased; however, the numbers of electrical technicians and other inspectors were fair compared to last year.

#### **F. Building interior construction**

There were 3,572 building interior construction companies by the end of 2007 which increased 7.8% in comparison with 3,314 in 2006; 3,075 design

construction factories (86.1%) and 479 construction factories (13.4%). Taipei City had the most companies – 1,557 (43.6%), followed by 532 in Taipei County (14.9%) and 344 in Kaoshiung City (9.6%). There were 11,057 construction specialists which increased 8.8% in comparison with 10,164 in 2006; 8,845 of professional design construction specialists (80.0%) and 2,034 professional construction specialists (18.4%).

#### **G. Parking spaces in the buildings**

There were 2,666,868 parking spaces in the buildings by the end of 2007; 13,259 for large vehicles (0.5%), 2,282,962 for automobiles (85.6%), 370,647 for motorcycles (13.9%). In Taiwan Province, Taipei City had 704,560 parking spaces (26.4%), Taipei County had 344,904 (12.9%) Taoyuan County had 335,180 (12.6%) ,Kaoshiung City had 229,022 (8.6%) and Taichung City had 181,019 (6.8%). The number of parking spaces in the urban development project areas was 2,405,801 (90.2%) and 261,067 (9.8%) parking spaces for in non-urban development project areas.

#### **H. Issue of Construction Licenses**

1. 31,704 Construction Licenses were issued in 2007 and compared with last year's figure, the number decreased 9.9%. The total floor area was 34,732,493 square meters, which decreased 5.3%.
2. Taipei County, which had 6,079,000 square meters (17.5%), had the most total floor area; followed by 3,801,000 square meters (10.9%) in Taipei City and 3,611,000 square meters (10.4%) in Taoyuan County. In comparison with last year's figures, the total floor area increased the most in Kinmen County (83.4%), followed by Hsinchu County (50.4%) and Taichung City (49.7%). The total floor area decreased in the following city and counties: Taitung County(43.0%), Tainan City (40.0%) and Chiayi County (31.0%).
3. In terms of the usages, Housing (H-2) had 19,359,000 square meters (55.7%), Industry and Warehousing (C) had 5,956,000 square meters (17.1%) and Business and Service (G) had 2,939,000 square meters (8.5%).
4. In terms of the structures, 27,171,000 square meters were concrete construction, including steel concrete construction (78.2%), 3,896,000 square

meters were steel construction (11.2%) and 3,432,000 square meters were steel reinforce concrete construction (9.9%).

## **I. Issue of Usage Licenses**

1. 34,797 Usage Licenses were issued in 2007, which decreased 8.4% compared with last year's figure; the total floor area was 36,024,000 square meters (decreased 0.5%).
2. Taipei County had the most construction area: 5,968,000 square meters (16.6%), followed by 5,097,000 square meters in Taoyuan County (14.1%) and 3,002,000 square meters in Taipei City (8.3%). In comparison with last year's figures, Lienchiang County increased 1374.4% total floor area, followed by Hsinchu County (94.5%) and Chiayi County (34.6%); however, the total floor area decreased in the following counties: Penghu County (40.6%), Kaoshiung City (36.7%) and Kaoshiung County (35.1%).
3. In terms of the usages, Housing (H-2) had 21,578,000 square meters (59.9%), Industry and Warehousing (C) had 6,163,000 square meters (17.1%) and Business and Service (G) had 2,772,000 square meters (7.7%).
4. In terms of the structures, 29,443,000 square meters were concrete construction, including steel concrete construction (81.7%), 3,237,000 square meters were steel construction (9.0%) and 3,076,000 square meters were steel reinforce concrete construction (8.5%).
5. In terms of the height, compared to last years' figures, the buildings of 7 – 15 meters and 15-30 meters decreased 11.3% and 1.2% respectively; others increased. The total floor area of buildings from 60-75 meters increased the most: 38.9%; followed by 28.0% of buildings over 75-90 meters and 20.6% of buildings from over 90 meters.
6. In terms of the analysis of buildings of 15 stories or above, the total floor area of buildings of 15 stories or above was 4,673,000 square meters in 2007, which was 13.0% of the whole area (36,024,000 square meters) and increased 9.0% compared with last years' figure. Taipei County had the most total floor area(1,911,000 square meters); followed by 755,000 square meters in Kaoshiung City, 712,000 square meters in Taipei City, 595,000 square meters

in Taichung City, 384,000 square meters in Taoyuan County, 154,000 square meters in Hsinchu County, 104,000 square meters in Tainan City and 58,000 square meters in Hsinchu City. However, the rest other 15 cities and counties did not issue Usage Licenses for buildings of 15 stories or above.

#### **J. Statistics of Advertisement Management**

The number of applying permission advertisement is 2,527 in 2007: 2,271 of signboard (90%) and 256 of vertical advertisement (10%). Taichung City had the most advertisement – 1,141 (45.2%), followed by 654 in Taipei City (25.9%), and 258 in Taipei County (10.2%). There were 11,022 of prosecution cases, 10,354 of removing and tearing (93.9%), and 668 of fine (6.1%).

#### **K. Management Companies in Apartment and Large Buildings**

The number of management companies in apartment and large buildings is 518 in the end of 2007 which increases 3.8% in comparison with 2006. The numbers of affairs managers and technicians (including administrator of fire prevention escape facility and administrator of facility security) who obtained the certificate according to Condominium Management Ordinance (CMO) are 1,092 and 1,955. Total number of managers is 3,047 which increases 11.9% in comparison with 2006, 1,221 of administrator of facility security (40.1%) and 1,092 of affairs managers (35.8%). Taipei City and Taichung city had the most companies – 118 (22.8%) respectively, followed by 86 in Taipei County (16.6%) and 69 in Kaoshiung City (13.3%).